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THE DIAGNOSIS OF LEPROSY, ESPECIALLY THE DIFFERENTIATION OF THE ANÆSTHETIC FORM FROM SYRINGOMYELIA.*

By PRINCE A. MORROW, A. M., M. D.,
Surgeon to Charity Hospital.

THE growing interest and importance which leprosy is assuming in the estimation of the profession in this country and Europe have led me to offer a few suggestions upon its diagnosis.

It must be admitted that in text-books on dermatology the diagnosis of leprosy scarcely receives the consideration its importance demands. By most writers the impression is conveyed that the disease is so easy of recognition that extended reference to the differential points which distinguish it from other diseases is entirely superfluous. This omission may be due to the fact that few of the writers have had opportunities for the clinical study of the disease, and are therefore not practically familiar with the multiform manifestations which it may assume in the process of its evolution.

Unquestionably the clinical features of a case of leprosy, typical in its development and advanced in its evolution, are so striking and characteristic as to be absolutely pathognomonic; it is impossible to confound it with any other disease. But in the early stages, and even in fully developed cases with atypical manifestations, the diagnosis often presents serious difficulties.

During my sojourn in the Sandwich Islands I had the opportunity of making frequent visits to the Reception Hospital at Honolulu, where lepers and persons suspected of leprosy are gathered from all parts of the Hawaiian kingdom. Here they are subjected to a careful examination by a board of physicians appointed by the government for that purpose, and,

* Read before the American Dermatological Association, September 17, 1889.

as a result of this examination, they are declared to be "lepers," "non-lepers," or "suspects."

I was impressed with the large proportion of the latter class, which embraced all those who presented suspicious symptoms of leprosy, but in whom evidences of the disease were not sufficiently clear and unequivocal to warrant their consignment to the leper settlement of Molokai. They were remanded for further observation until the suspicious symptoms cleared or they should develop positive and unmistakable signs of leprosy.

The large number placed in the category of "suspects" is not to be accepted as a reflection upon the diagnostic ability of the Board of Examiners, each of whom is possessed of a special skill in this work, developed by thorough training and a large practical experience, but rather as a proof of the indeterminate character of certain symptoms which might be referred either to leprosy or to other diseases.

According to my observation, the diseases with which leprosy was most liable to be confounded were certain eruptions of the erythematous type, various pigmentary affections of the skin, more especially of parasitic origin—as chromophytosis, tropical ringworm, etc., syphilis, sarcoma, scrofulosis, and certain diseases of the nervous system.

One element of confusion was the frequent existence of irritation and inflammatory conditions of the skin from the presence of parasites, the bites of insects, and various external irritants incident to a tropical climate. The accompanying pruritus and other subjective sensations unfortunately masked the sensory disorders which constitute a sign of decided diagnostic value in leprosy.

In the consideration of this subject it will be convenient to study separately the diagnosis of the two principal forms of leprosy—the *tuberculated* and the *anaesthetic*—since the determination of the morbid process to the tegumentary system in the one form and to the nervous system in the other gives rise to such a diversity of manifestations that the clinical pictures presented by each are entirely distinct. Further, in order to bring into relief the elements which serve as the basis of diagnosis, it will be necessary to pass briefly in review the more prominent and characteristic symptoms peculiar to each form.

TUBERCULATED LEPROSY.—The prodromal symptoms which precede the eruptive stage of the tubercular form, while occurring with more or less constancy and regularity, possess but little diagnostic value. The feebleness, malaise, digestive troubles, vertigo, febrile movement, wandering pains, etc., are indefinite, and present nothing absolutely characteristic. The same symptoms may be present in the secondary incubation of syphilis, or in other infectious diseases; the attacks of fever succeeded by profuse perspiration are frequently mistaken for ague. Their significance is seldom recognized until objective signs of the disease are manifest, and

then they are of course valuable as a retrospective aid in diagnosis. Incidentally it may be said that dysæsthesia and other sensory disorders which form so valuable an element in the diagnosis of anæsthetic leprosy frequently fail in the tubercular form, and their presence or absence may be disregarded; anæsthesia is rarely a pronounced feature, except in the later stages, and then it is usually limited to circumscribed areas, as the center of a tubercular patch or its immediate neighborhood.

The macular lesions which ordinarily constitute the first cutaneous manifestations of leprosy present nothing absolutely pathognomonic either in their objective characters or course. They consist of erythematous spots and pigmented patches, the latter often representing a stage in the involution of the former. The hyperæmic macules are round, oval, or irregular in shape, and vary in size from that of a lentil to palm-sized and larger patches. Ordinarily they are of a reddish color, fading into a brownish-red or coppery tint, sometimes into a purplish-red or vinous hue, the color disappearing upon pressure. The coloration is markedly influenced by the complexion of the individual and the chronicity of the process. The first spots are transient in duration; they may disappear in a few weeks, leaving no trace, or they may leave brownish or pigmented spots resembling chromophytosis. They are not infiltrated, or the infiltration may be so slight as to be scarcely appreciable; later, however, they are attended with a thickening of the skin and are perceptibly elevated.

These patches may come and go a number of times, but with the progress of the disease they remain permanent, and, instead of undergoing resolution, they become infiltrated and elevated into the tubercular excrescences which characterize the nodular stage. It is to be remembered, however, that tubercles often develop upon a new surface without preceding infiltration. Incidentally it may be said that leprosy is capable of causing almost every conceivable change in the coloration of the skin. The macules may be grayish, yellowish, brownish, or blackish; often they present a brownish-red or vinous hue; sometimes they are perfectly white, recalling the aspect of vitiligo. They are as variable in their size and shape as in their coloration; not infrequently they form by their coalescence large margined patches resembling *eczema marginatum*, the center of the patches presenting a peculiar port-wine discoloration. Fig. 1, Chromolithograph represents a case of tubercular leprosy in which the macular lesions are peculiar in their color, contour, and distribution.

Dr. N. B. Emerson, President of the Board of Health of Hawaii, has kindly furnished me the following notes of the case:

Makaeha, male, aged about twenty-four years, Hawaiian, born of native parents. He is one of a family of eight brothers and two sisters, of whom one brother besides himself is a leper, and the father of the family was also a leper.

The disease first made its appearance on his abdomen as a light-colored patch, circular in shape; this increased in size, and before long spots of the same sort appeared on other parts of his body in increasing numbers until his whole body was spotted with them.

At the same time as the appearance of this eruption on his abdomen he had a sharp attack of fever with chills—regular leprous fever—from which he soon recovered. He says he was not so ill at any time but that he kept on with his work.

About the middle of 1888 tubercles appeared on his face. He appeared before the Board of Examiners for Lepers on April 19, 1889, and was then declared a leper and sent to Molokai.

Present Condition.—The tubercular symptoms are of but slight prominence, are located on his face and ears; but they alone would sufficiently mark him as a leper. They consist of tubercles of about the size of buck-shot imbedded in the tissues.

The macules or colored patches are the prominent feature of the case. They appear scattered over his trunk in patches of irregular contour and of a size varying from a finger's breadth to two or three fingers' breadth, being found most thickly distributed over the back, shoulders, chest, and abdomen, thinning out on the rump and thighs and entirely disappearing about the knees.

The portions of sound skin between the patches are of a dark-brown hue. The patches themselves are of a yellowish-gray color, with the yellow and the gray of different degrees of intensity in different patches, and in some parts of the back showing about the center of the patch a ruddy, pinkish tint, as if from congestion.

The arrangement of the patches on the upper part of the trunk appears to be in arches or rows following the line of the ribs. This arrangement is most marked over the upper part of the back. The patches are raised in slight relief, giving to the skin of the upper part of the body the appearance of *repoussé* work. The degree of congestion of the patches varies somewhat from time to time.

The left elbow presents an ulcer surrounded by a ring of darkly pigmented and indurated tissue, probably caused, as is the case in many lepers, by pressure from habitually using this elbow as a fulcrum of support while reclining.

The earlier erythematous spots often simulate closely maculo-papular erythema. They are distinguished by their localization, their larger size, the absence of desquamation, and their slower involutive changes.

The diseases for which tubercular leprosy is most liable to be mistaken are syphilis, sarcoma, and lupus.

Syphilis presents many clinical analogies with leprosy, both in the polymorphous character of its manifestations and their mode of evolution. In both, the general accidents develop after a prolonged period of incubation; they come out in successive crops, affecting first the superficial and later the deeper structures. Syphilitic roseola has its analogue in leprous erythema; syphilitic pigmentation, in the pigment spots of leprosy;

syphilitic alopecia, in the alopecia of leprosy. The papules and tubercles of syphilis have their counterpart in the dermic and hypodermic nodules of leprosy. In both, the neoplasms follow the same course of involution; they may undergo resorption, they may soften and suppurate, or they may disappear by a process of ulceration, sometimes involving extensive surfaces and leaving characteristic cicatrices. Their points of dissimilarity are, however, too numerous and obvious to merit mention.

Syphilitic roseola may be distinguished from leprous erythema by the smaller size and fainter coloration of the lesions, their absence from the face and limitation to parts habitually covered by the clothing, and their more rapid disappearance. The pigmentations of leprosy are readily distinguished from the pigmentary syphilide as well as the posthumous pigmentations of syphilitic infiltrations.

The lenticular tubercles of leprosy, when they are disseminate, small, slightly elevated, with moderate desquamation, may simulate absolutely a papular syphiloderm.

It is, however, the tubercular form of syphilis which bears the most deceptive resemblance to leprosy. The syphilitic nodules are more circular in outline, more reddish-brown or coppery in color, more apt to be grouped in circular and crescentic forms, and more rapid in involution. The ulcerations of syphilis are more rounded and circumscribed in extent, the crusts are thicker, harder, and of a brownish, blackish, or greenish tint. The large superficial infiltrations of leprosy are not seen in syphilis. Leprous neoplasms are larger in volume, more protuberant and crowded upon an infiltrated base, with œdema of the skin and ganglionic enlargements. Their seats of predilection are the facial mask, the ears, backs of hands, and forearms, more rarely disseminated. The leontiasis of leprosy is more pronounced than that of syphilis. The enormous nodular masses, the deep orbital and supra-orbital furrows, the pillowy-like protuberances of the cheeks, with loss of the eyebrows, are never observed in syphilis. Still, in many cases of less exaggerated development, the facies of leprosy may simulate most closely that of syphilis.

Syphilitic infiltrations of the mucous membranes bear a most deceptive resemblance to those of leprosy; they affect the same structures and are followed by the same extensive destruction of tissues. The breaking down of the osseous framework of the nose, resulting in the broadening, flattening, and sinking in of this organ, is more common in leprosy. The harsh, raucous, or croaking voice of leprosy, the difficulties of deglutition and respiration, and the peculiar foul leprous odor exhaled by the breath, serve to distinguish it from syphilis.

In doubtful cases the influence of specific treatment constitutes a most valuable means of differentiation. The administration of mercury and iodide of potassium causes an aggravation of the symptoms of leprosy.

Sarcomatosis generalis, or *mycosis fungoide*, is another disease which has been frequently confounded with leprosy. The analogies between the earlier eruptions of these diseases are so many and marked that *mycosis fungoide* has been not inaptly designated by Bazin as *indigenous leprosy*. Both diseases are characterized by an eruption of congestive spots or patches which may appear and recede a number of times before becoming permanent. These patches become the seat of the tumor formations characteristic of each disease. The tubercles may disappear by a process of resorption, or they may break down and ulcerate. Both diseases almost invariably progress to a fatal termination.

The erythematous patches of *mycosis* present a brighter or deeper red coloration; they are quite perceptibly elevated, with a more regular and distinctly circular contour, often surrounding islets of perfectly healthy skin. The macules of leprosy do not present the desquamating surface of the "eczematous patches" nor the pointed, somewhat mammillated elevations of the "lichenoid plaques" of *mycosis fungoide*. When the fungating stage of *mycosis* is reached and the tumors soften and suppurate, the two diseases may be readily differentiated.

Lupus may be mistaken for leprosy, especially when the leprosy lesions consist of small, brownish-red tubercles grouped upon an infiltrated base and localized upon the cheeks or face; the frequent involvement of the lobe of the ear in *lupus* heightens the similitude.

There are many other diseases for which tubercular leprosy in its atypical forms has been mistaken: for *lichen planus*, when the neoplasms are small, flattened, and closely aggregated; for *acne indurata* and *rosacea*, as instanced by Hebra; for *sycosis*, when the tubercles are limited to the hairy parts of the face. Leloir mentions a case in which the size, shape, and disposition of the lepromata was strikingly suggestive of *erythema nodosum*. I recently saw a case in which the tumors of *molluscum fibrosum* had been mistaken for leprosy nodules.

Leprosy may be simulated by *dermatitis medicamentosa*, especially the severer forms of bromic and iodic eruption. The frequent limitation of the iodic lesions to the face and dorsal surface of the hands and forearms, which are the seats of predilection for leprosy nodules, renders the resemblance more complete.

Fortunately, in cases of tubercular leprosy a positive element of diagnosis is furnished by the microscopic examination of the leprosy neoplasms. The *Bacillus lepræ* is invariably present in leprosy tissue and in no other. Thanks to recent improvements in chromo-technique, the identification of the bacillus in the diseased tissues is readily made.

THE ANÆSTHETIC FORM of leprosy presents a greater variety and complexity of symptoms than the tubercular. In addition to the macular spots of the early eruptive stage, pemphigoid lesions, sensory and motor

disorders, and various trophic changes of the dermal system, as well as of the deeper seated structures, leading to atrophy, mutilation, and deformity, may be present.

While the identification of the lepra bacillus in the tissues is rarely practicable in this form, because of its situation in structures so deep as to render excision dangerous, yet the invariable presence of anæsthesia in established cases constitutes a diagnostic element of almost pathognomonic value.

The prodromata of the anæsthetic form are distinguished from those which precede the outbreak of the tubercular form by the absence of febrile symptoms and the greater frequency and more pronounced character of the neurotic symptoms. Hyperæsthesia and itching of the skin, with neuralgic pains of a sharp, lancinating character, point to the active participation of the nervous system in their production.

The macular lesions are both of a congestive and pigmented character. Anomalies of pigmentation frequently develop, however, without preceding hyperæmia. They commence as pale or dull-red spots, and change into a brownish, yellowish, *café au lait*, sometimes ashy-gray color. They are usually persistent, and manifest a tendency to clear up in the center while spreading at the periphery. By this mode of centrifugal extension, and the coalescence of contiguous patches, they form arcs of circles and large gyrate patches, with slightly elevated margins of a reddish brown, port-wine, sepia, or slaty color.

The macules are hyperæsthetic upon their first appearance, but as the central portion clears up the hyperæsthesia recedes to the pigmented periphery and is replaced by anæsthesia of the center. It would seem that in the evolution of these macules, hyperchromia and hyperæsthesia, achromia and anæsthesia are associated and advance *pari passu*.

In many cases the sensory disorders constitute the only certain element of diagnosis, as is well illustrated in a case at present under my observation :

In this patient the eruption began nearly five years ago as a small red, somewhat itchy spot on the anterior surface of the left foot at the base of the great toe. It enlarged slowly and almost imperceptibly. After a time it cleared in the center while extending peripherally. At the present time it involves almost the entire upper and part of the under surface of the foot. The hyperchromic margin may be seen extending along the root of the toes and advancing with a circinate sweep along the outer aspect of the foot upward to the ankle joint, crossing the instep and continuing down under the instep and the inner half of the sole, and emerging upon the integument of the first phalanx of the great toe. The margin is irregularly scalloped, slightly elevated, one quarter to half an inch in width, and of a brownish or lilac tint. The central portion presents a bluish-gray tint, the coloration depending upon the

atrophy of the skin, through which the superficial vessels are more apparent. (Fig. ii. Chromo-lithograph.)

Upon the anterior inner aspect of leg, at junction of middle and upper third, there is a patch two inches in diameter (not shown in the picture) which began three years ago. The center is faintly pigmented, the margin made up of brownish-red puncta, and partly of diffused redness. These minute points seemed to represent infiltration of the follicles. This patch was anæsthetic in the center. Above external malleolus there were two irregularly circular macules, each about the size of a silver quarter, which made their appearance about two years ago. The center is beginning to clear, though still pigmented, the margin of a deeper, more brownish red. But slight impairment of sensation could be detected in these more recent patches.

In the central portion of the older patch there is complete loss of the pain and temperature sense. The tactile sense is but slightly impaired, while the muscular sense is apparently unchanged, while just beyond the hyperæsthetic, hyperchromic margin normal sensibility is preserved in absolute integrity. The situation and appearance of the lesions are well shown in the accompanying colored drawing. Were it not for the element of anæsthesia, I believe it would be impossible to diagnosticate the nature of this eruption.

In all these cases the first sensory disorder is hyperæsthesia, followed by analgesia and thermo-anæsthesia with or without impairment of the tactile and muscular sense. In advanced conditions, where all the fibers of the nerve are destroyed, there is complete abolition of all sensory functions.

Instead of undergoing the course of evolution just described, the anomalies of pigmentation may develop *d'emblée*—that is, they are hyperchromic or achromic from the first.

These spots vary in size, color, shape, and situation. They may be quite small; they may be coppery, dull-red, deep-brown, mahogany, and slaty, or they may be yellowish or fawn-colored, giving quite a deceptive resemblance to chromophytosis or lentigo; in tropical countries the pigment spots of *lentigo* and *ephelides* are large, numerous, and quite conspicuous, they are distinguished from *chromophytosis* by the absence of scalliness and the parasite peculiar to this disease. The affections with which the achromic spots may be confounded are vitiligo and morphæa. The patches of *vitiligo* are irregular in shape, of a dead white, their margin convex and clearly defined against the surrounding pigmented border; the hairs of the leucodermic surface are almost invariably white, the skin normal, unaltered in structure or sensibility. In leprous leucoderma the spots are grayish-white, not so sharply defined. The skin is often altered in structure, atrophic, depressed, sometimes corrugated, completely anæsthetic. The hairs of the affected surface often fall out, and are not invariably white. *Morphæa* is distinguished by its location, its waxy white, lardaceous appearance, its hard, unyielding consistence, and its lilac bor-

der. As is well known, the terms *morphæa alba*, *atrophica*, *rubra*, *nigra*, etc., were formerly applied to the lesions of leprosy.

The *pemphigoid blebs* which characterize this form of leprosy may be mistaken for the lesions of *pemphigus vulgaris*. They vary in volume from the size of a pea to that of an egg, or larger; ordinarily they make their first appearance upon the extremities; they come out in successive crops, and may invade the entire surface; they are often followed by superficial ulcerations exceedingly slow in healing; the cicatrices are white and glistening, and surrounded by a characteristic pigmented border. They are distinguished from the blebs of *pemphigus vulgaris* by their sparser and more superficial character, and by the *dysæsthesia* which ordinarily accompanies or succeeds them.

Another lesion met with in both the tubercular and anæsthetic forms is the plantar ulcer, which is of frequent occurrence in tropical climates where patients go barefoot. It bears a most deceptive resemblance, both in objective characters and evolution, to *mal perforans*.

Other tropho-neurotic changes consist of anæsthesia, not limited to circumscribed areas, but involving large surfaces; paralysis of certain nerves, with atrophy of the dermal and muscular tissues they supply—all depending upon partial or complete degeneration of the nerve fibers, thus interfering with their conducting capacity. The lesions of the bones and joints, with mutilation and deformities, can scarcely be confounded with the clinical picture of any other disease.

In many cases, however, leprosy pursues an anomalous course. The macular, pemphigoid, and other trophic changes may be absent, and motor and sensory disturbances constitute the only manifestations. There are many diseases depending upon lesions of the peripheral nerves and cord the symptoms of which may be accurately simulated by leprosy. Indeed, when we consider that the essential pathological change in anæsthetic leprosy consists of multiple neuritis, it is not surprising that its symptoms should be confounded with those of nervous origin from other causes. When these neuritic changes are accompanied by the presence or history of leprous exanthems, or phenomena of hyperæsthesia and anæsthesia, swelling of the nerves, disturbances of the sweat function, leprous coryza, etc., there is no difficulty in diagnosis; but when these concomitant evidences fail, and the paralytic and atrophic changes constitute the sole objective signs, remaining stationary, and persisting for months or years, the diagnosis may become exceedingly difficult.

Leprous neuritis may be limited to one or more nerves—the ulnar, for example—and the sole symptoms may consist in trophic changes of the hand. The paralysis may be limited to muscles supplied by certain branches of the third or seventh pair, the paralysis of the orbicularis rendering it impossible to close the eye, or the face may be drawn to one side.

The atrophic and degenerative changes are often limited to the muscles of the hand and forearm, producing an accurate clinical picture of progressive muscular atrophy. There is the same wasting of the interossei, of the thenar and hypothenar muscles, paralysis of the extensors, with the resulting *main en griffe* characteristic of muscular atrophy, from which, however, it is readily differentiated by the sensory disorders present in the one and absent in the other.

Leprous neuritis presents many analogies with multiple neuritis of toxic or malarial origin, distinguished, however, by its more chronic course and the attendant dysæsthesia.

The characteristic deformity of chronic rheumatism or *arthritis deformans* may be seen in leprosy. Leprosy has been mistaken for *hysterical paralysis*, *mutilating sclerodema*, and many other diseases characterized by trophic changes.

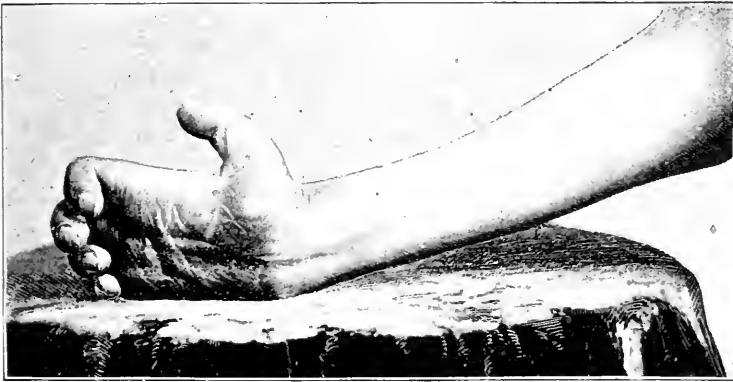
Syringomyelia is a disease with which anæsthetic leprosy sometimes present the closest clinical analogies and from which it may be most difficult to differentiate. As the clinical features of this comparatively recently recognized neurosis may not be present to the minds of those not specialists in neurology, I may be pardoned for referring briefly to its more characteristic symptoms. A few years ago it was regarded as an exceedingly rare affection and its diagnosis impossible during life. Recently, from one hundred and thirty to one hundred and fifty cases have been reported, and it is no longer looked upon as a pathological curiosity, but as a disease with a definite symptomatology sufficiently characteristic to admit of its recognition during life. It is characterized anatomically by cavities in the cord of variable dimensions and situation, and clinically by analgesia, thermo-anæsthesia, and muscular atrophy. The sensory disorders and trophic troubles vary according to the size and location of the abnormal cavities in the cord. The atrophy is of the Aran-Duchenne type, and localized more especially in the muscles of the hand and forearm, with slight wasting of the deltoid. There is degeneration of the interossei, disappearance or flattening of the thenar and hypothenar eminences, resulting in permanent flexion of the fingers (*main en griffe*). The disturbances of sensibility consist in absolute loss of the pain and temperature sense, with a relative or complete conservation of the tactile and muscular sense; in the majority of cases there is complete preservation of the muscular sense. The reaction of degeneration may or may not be present in certain muscles.

The cutaneous trophic disorders consist of modifications in the secretion of sweat, eruptions, ulcerations, with articular and osseous lesions, loss of phalanges, etc. After a certain period of development the disease may remain stationary. According to Déjérine, who has studied the relations of syringomyelia to leprosy, the error of confounding the two diseases has

been frequently made, and, indeed, he regards it as almost inevitable in the absence of the prior manifestations and aetiological history of leprosy.

The following case, at present under my observation, illustrates the difficulty of differentiating the two diseases:

The patient, aged twenty, is a native of the Sandwich Islands; father and mother both living in good health; when about eight years old he had a fall, sustaining a fracture of the right clavicle. For a long time afterward he experienced a sense of soreness or lameness on the affected side. Within one to three years (the patient's testimony is not clear upon this point) he noticed a numbness of the hand, with a tendency to contraction of the fingers. This gradually increased, becoming more pronounced. He was treated by the application of the actual cautery to the spine on the supposition that his trouble was of central origin. For the last several years the contraction of



the fingers has remained unchanged, but the sensation of numbness has crept farther up the forearm.

Upon examination, he was found to be well nourished; some atrophy of the muscles of the right arm, more especially below the elbow; deltoid somewhat wasted; circumference of right arm measured one inch less than that of left; also atrophy of the muscles of the right leg. Fingers contracted, as shown in the accompanying cut; over knuckle of index-finger a superficial sore from slight traumatism has existed for several weeks without healing; nails thickened and deformed.

Over lower half of forearm and hand entire absence of all sensations; from middle of forearm to middle of arm impaired sensation over regularly limited areas, extending higher on some aspects than on others; temperature sense on inner side of arm abnormal: hot water mistaken for cold, etc. On right lower extremity sensation normal except anterior and outer surface of ankle and foot. Anterior leg muscles atrophied, with paresis.

Electrical excitability of the muscles of the arm, upper and forearm, obtainable; below this point lost. Reaction of degeneration in muscles of hand. Patellar tendon reflex on right side exaggerated. There were two or three

brownish spots on forearm, of the duration of which the patient could give no account.

The patient had left the Sandwich Islands in his ninth year, and had not returned except for a brief visit in February of the present year.

While this case presents many of the more characteristic symptoms of syringomyelia, it may, I think, be differentiated from that disease by the sensory disorders present and the associated trouble in the lower extremity and by the history of exposure in a leprous country. In syringomyelia there is ordinarily only a partial sensory loss. Analgesia and thermo-anæsthesia are present, while the tactile and muscular sense are preserved in comparative or absolute integrity. In well-established, advanced cases of leprosy the sensory loss is complete.

Was my case one of leprosy? While the patient certainly does not present the complete clinical picture of the disease, yet the atrophy, the contractures, and the entire loss of sensation are most typical features. As points against leprosy may be suggested the asymmetrical character of the lesions and the stationary character of the morbid process during several years. According to my observation, unilateral manifestations of leprosy are by no means uncommon, at least up to a certain stage of its development. As to the second point, it may be said that while in the immense majority of cases leprosy is essentially progressive, there are abundant clinical examples of abortive or undeveloped cases. The morbid process progresses to a certain stage and then definitely ceases, the patient may live for years afterward, and die from some intercurrent disease. By the removal of my patient at an early age to this country, where the climatic and other conditions are unfavorable to the development of leprosy, no doubt his capacity of resistance was increased and the further progress of the disease arrested.

Finally, in countries where leprosy is not endemic, but is only accidentally met with, an inquiry into the history and antecedents of the patient may give a clue to the nature of suspicious symptoms. The history of possible exposure, either by known contact with a leper or residence in a country where leprosy prevails, is, of course, a *sine qua non* of contagion. The modes of infection are so many and mysterious that the mere fact of residence in a leprous country is sufficient presumptive proof of contagious exposure. A patient, at present under my observation, undoubtedly leprous, resided for a short time in the Sandwich Islands, but was unconscious of ever having seen or come in contact with a leper.

KERATOSIS FOLLICULARIS
(PSOROSPERMOSE FOLLICULAIRE VÉGÉTANTE).

A SECOND CASE.

By JAMES C. WHITE, M. D.,
Professor of Dermatology in Harvard University.

IN the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES for June, 1889, I published the account of a remarkable case of cutaneous disease, such as I had never seen before, and of which I could find no description in literature. It was characterized by concretions of epithelial cells, varying in size from the head of a pin to horn-like masses of half an inch in height, which had their origin within the mouth of the sebaceous glands, and occupied nearly the whole surface of the body. I called the disease, therefore, keratosiſ follicularis.

At the International Congress of Dermatology, held at Paris in August, a patient was shown as an example of an affection described by Darier, *chef du laboratoire de la Faculté à l'hôpital Saint-Louis*, in the "Annales de dermatologie et de syphiligraphie," July 25, 1889, under the title *psorospermose folliculaire végétante*. The same affection had formed the subject of a "Thèse de Paris" by Dr. A. Thibault, May 8, 1889. M. Darier had previously made a communication upon the subject before the Société de biologie on March 25, 1889. The observations of these gentlemen, unknown to me before the meeting of the congress, were based upon two cases of the affection which had been seen at the Saint Louis Hospital during the preceding year. One of these was the patient exhibited to the congress, and the appearances he presented were identical with those of my patient, although the lesions in the former were far less developed in diversity and magnitude, as the duration of the disease was only eight years. I had no hesitation in pronouncing the affection to be the same as that described by myself under the name keratosiſ follicularis, and stated further that, although I was not prepared to deny the correctness of M. Darier's conclusions as to the parasitic nature of the peculiar cells found in the epidermal concretions, neither Dr. Bowen, who had made the microscopic studies in my case, nor myself had recognized them as of such a character.

The conclusions of M. Darier may be briefly stated as follows: There exists in man a group of cutaneous diseases, which deserve the name of psorospermoses, due to the presence in the epidermis of parasites of the order of sporozoaïres. This class includes the gregarina, the oval psorospermæ or coccidia, the sarcosporidia, the psorosperms of fishes or myxosporidia, and the psorosperms of the articulates or microsporidia. All these organisms live as parasites upon other animals, and give rise, in certain

cases, to fatal diseases. The coccidia, to which the forms in question are claimed to belong, inhabit almost exclusively the epithelial tissues of vertebrates. They are distinguished from the sporozoaires, especially the gregarinae, by absence of movements at any period of their development, their intracellular habitat, their solitary encystment, and by the limited number of spores which develop in the cysts. Among the best known is the oviform coccidia of the biliary ducts of the rabbit, where it produces cysts. In the affection *psorospermose folliculaire végétante* coccidia of a

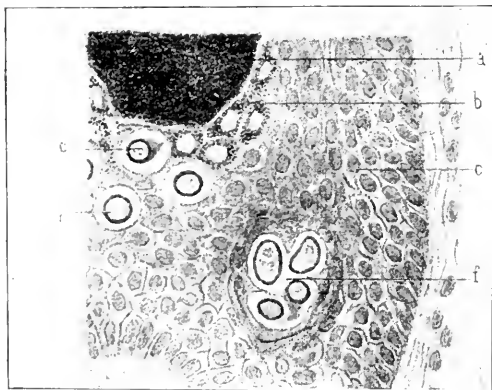


FIG. 1.—EPIDERMAL PLUG, NEIGHBORHOOD OF A HAIR FOLLICLE INVADDED BY PSOROSPERMS

a, stratum corneum; *b*, stratum granulosum; *c*, stratum Malpighii; *e*, *e*, *f*, encysted psorosperms.

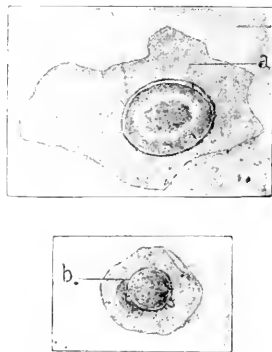


FIG. 2.—TWO CELLS FROM THE DEEPER PORTION OF A FOLLICULAR PLUG, EACH CONTAINING AN ENCYSTED COCCIDIA.

Reproduction, in part, of the illustrations of M. Darier's paper.

particular kind invade the follicular orifices under the form of round bodies, generally encysted and contained within the epithelial cells, or of refracting granules, the accumulation of which forms a plug, which projects from the mouths of the follicles. The presence of these parasites establishes the diagnosis of this disease, inasmuch as they are not met with in any clinically analogous affection. The neck of the follicles thus attacked becomes secondarily the seat of papillomatous affections, which may become enormously developed and be converted into real tumors. This affection, in its aetiological relations, should be placed with Paget's disease,* and probably with molluscum contagiosum.

* In a paper presented to the congress by Dr. Louis Wickham, *interne de l'hôpital Saint-Louis*, on "The Pathological Anatomy of Paget's Disease," he describes the microscopic appearances as follows: "In accordance with Darier, he was able to affirm that the peculiar cellular alterations of the epidermis and of its prolongations, formerly considered, in order to explain the difficulty away, either as consisting of degenerated cells, or as of cells in process of endogenous transformation, are no other than parasites belonging to the class of sporozoa, of the order of psorospermose. These parasites were seen in different stages of their evolution. At the commencement they consisted

Early after my return from the congress there presented herself at my clinic at the Massachusetts General Hospital a case sent by Dr. Everett, of Worcester, for diagnosis, under whose observation it had been for eighteen months. The forehead and posterior portions of the cheeks, as low as the angles of the jaw, were thickly occupied by discrete, dry, firm, brownish papular elevations, semi-globular in shape, and varying in size from a small to a large pin's head. The same lesions were more sparsely distributed on the sides of the nose and on the chin, where they had more recently appeared. They were also present on the neck and upper front chest. The backs of the hands presented also many minute, flattened, and smooth papules, which had the color of the normal skin. All these appearances might not, perhaps, have excited particular attention if seen before acquaintance with those of my first case, especially as the face at this visit was in a state of active inflammation, resulting from the action of applications then in use. An examination of the lower abdomen, hips, and upper thighs showed, however, the presence of much larger and more striking lesions, which confirmed the correctness of the suspicions aroused by the appearances upon the exposed parts of the skin. These surfaces presented numerous firm hemispherical and conical prominences, of a dark-brown color, two or three times as large as those above described, and more horn-like in consistence. They were all seated above the mouths of the sebaceous glands; over the pubes they were the most abundant and largest. They resembled in all particulars the lesions of the same grade of development in the case reported by me in the *JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES* in June, and in that exhibited at the Paris Congress, above referred to. The disease was recognized by Dr. Bowen and myself as unmistakably identical with the former.

The patient was a girl twenty-one years old, and her history, as given by Dr. Everett and herself, was as follows: At the age of five or six there were dry and brown patches on the sides of her forehead, so that her playmates used to tell her that she had a dirty face. When she was fifteen this condition nearly covered her forehead. It appeared on her wrists, lower body, and thighs, also in early childhood; but she feels sure that it is less abundant upon the latter parts now than some years ago. The lesions upon the hands,

of amœboid masses, very difficult to distinguish from cellular protoplasm. The cell which contained the parasite increased considerably in size, and presented a more irregular form. At a given time the parasite became encysted, and its capsule, at first not clearly defined, became perfectly round, thickened, and brilliant. A distinct, enormously developed nucleus was then visible in the cell, having a round body and brilliant double contour, and in the central protoplasmic contents were to be seen two or several nuclear forms, which are no other than the pseudo-navicellæ. These distinct, well-developed bodies are coccidia, or psorospermia, in their adult condition. He believed that the presence of the parasites explained the pathological lesions."—From "Report of Congress," by Wickham, in "*British Journal of Dermatology*," October, 1889.

too, have become less distinct under the various treatments employed. The disease has extended upon the lower face within the last six months. The patient's left leg was amputated at mid-thigh, at the age of sixteen, for "white swelling" of the knee, which lasted nine years; and her general condition is not good.

After the examination of the patient had been completed the surprising discovery was made that the person described in my former article, whom she then accidentally met in the waiting-room, was her own father. This astonishing coincidence of so rare an affection in two members of one family naturally suggested the question of its possible bearings upon its aetiology, for, if we accept the views of M. Darier as to its parasitic nature, might not this concurrence be regarded as important evidence in favor of its communication from father to daughter by contagion? It was found on inquiry, however, that the daughter had been adopted by another family in infancy, and that her father had not seen her since she was a year old. This circumstance, although not absolutely excluding the possibility of the transference of the disease to her in this way, reduces the chance of such an occurrence to a minimum. There had been another child in the family, but it had died at the age of five, with a fair skin.

The question of heredity naturally suggests itself as furnishing a possible explanation of the appearance of the disease in Case II, an aetiological factor, as we know, of more potent influence in affections of the epidermal layers than in those of the other cutaneous structures.

Specimens of the concretions were removed from various parts by the cutaneous punch, and examined by Dr. Bowen. It may be briefly stated in advance that the structure of the lesions was shown to be identical with those of a corresponding degree of development in the first case, and that the modified epithelial masses contained the same peculiar cells or bodies as were found in the latter and in the French cases.

DEAR DR. WHITE: I have made a further examination, as you requested, of the lesions of Case I, in the light of M. Darier's researches, and have also studied those removed from Case II.

The lesions removed from the thigh in Case II showed the same appearances found in Case I—namely, a dilatation of the mouths of the follicles, this enlarged space being filled up with a horny mass. The same prolongation of the rete into the corium was also observed. In the lesions examined there was, too, no implication of the glandular structures. In a word, there can be no question of the anatomical identity of the lesions of the two cases.

Examination of some newly excised pieces from Case I demonstrates unequivocally the fact that Darier's cases represent the same pathological process as these two. The cells which he considers to be animal parasites belonging to the sporozoa are to be found in both Case I and Case II—namely, round bodies possessing a highly refractive membrane, usually containing a nucleus, and often appearing to be encysted. I find that their characteristics agree

in so many respects with the description of Darier that I shall confine myself to a few particulars in which I am unable to record the same results as this author.

1. Their intra-epithelial situation was not so clearly shown in my specimens. After softening the horny plug that filled the follicular orifice in a little dilute ammonia and staining with hæmatoxylin, the microscope gave the picture of numbers of round bodies with a highly refractive contour, usually less deeply stained than the more central portion, where a nucleus could often be observed, and, together with these, the ordinary epithelial cells and shreds. After looking over a large number of specimens with the greatest care, I could find but one or two places which suggested the appearances pictured by Darier in his Plate IV, Fig. 3, and Plate V, Fig. 7—namely, an epithelial cell containing the psorosperm-like body, with the appearance of a nucleus pushed to one side. In the few instances where I was able to find these appearances I could not definitely satisfy myself or others that the round bodies were not simply closely adherent to the underlying cell rather than contained in its protoplasm. Possibly the difference in results was due to an imperfect application of Darier's method, as he speaks of these appearances as very readily seen. Certainly their importance in considering the nature of these bodies can not be questioned.

2. Darier makes no mention of a process of cornification, but it seems very difficult to believe that there is not a hyperkeratosis taking place in these lesions, whether or not these bodies be coccidiæ. In the first place, the stratum granulosum in the dilated follicular mouths is greatly increased in width and in many places in the size of the granules, as is constantly shown in sections stained with hæmatoxylin and afterward treated with a one-per-cent. solution of hydrochloric acid. Moreover, it can be readily seen, in sections so treated, that the round, psorosperm-like bodies at the level of the stratum granulosum are affected in the same way by the reagents as the neighboring tissue cells, for they contain the deeply stained granules of eleidine. Above this layer these bodies are found to be scarcely or not at all stained, like the cells of the stratum corneum about them, and their outlines can be made out only in the lower portion of this layer. In Case I the horny plugs projected from the follicles to the extent of half an inch in some places, and the outer portion of the plug had precisely the appearance and consistency of a firm horn. Microscopically, sections cut parallel with the long axis of the horny plug showed the round, psorosperm-like cells at the base of the concretion, and they could be traced upward for some distance, gradually becoming flattened and fused together, until in the firm, hard, upper portion the mass is composed almost entirely of lamellæ, having much the appearance of broad bands of fibrous tissue, arranged in bundles running vertically and obliquely, and containing small elongated nuclei. Between these fibrous-like bands picrocarmine staining differentiates in some places aggregations of round, loosely connected, highly refractive cells; but the lamellæ make up the greater part of the outer portion of this horny projection. Now, if, as Darier asserts, these horny masses that project, in the advanced stages of the disease, half an inch above the level of the skin, are almost entirely made up of psorosperms, and if these bodies, when situated in the stratum granulo-

sum, contain granules similar to those characteristic of this layer, and, when in the stratum corneum, show the same reaction to staining agents as do the tissue cells—we are forced to the conclusion that they undergo at least a partial keratosis, or, in other words, are subject to much the same changes that affect the tissue cells proper—a phenomenon for which, so far as I am aware, we have no analogy in the history of animal parasites. In reply, it may be urged that the coccidiae are so closely incorporated in the epithelial cells of the stratum granulosum that the eleidine granules, which have every appearance of filling the psorosperm-like body, are in reality situated in the cell which envelops it; but even if this be granted, the fact that we have, in addition, a hyperkeratosis, can not, it seems to me, be denied. An analogy, too, may be found in the recent able article of Neisser on "Epithelioma contagiosum."* This author, while recognizing the molluscum bodies to be made up largely of gregarinae, another variety of the sporozoa, states emphatically that there occurs at the same time an exaggerated keratosis of the epithelial structures. Leloir and Vidal† also conclude that there is a hyperkeratosis in these lesions, although they express themselves with rather more reserve as to the parasitic nature of the molluscum cells. In any event, with regard to these two cases, it seems to me impossible to escape from the conclusion that there is present and continually active a *hyperkeratosis in the cutaneous lesions*.

These bodies strongly suggest, as Darier has observed, certain peculiar cell elements found in cancer. A number of specimens of flat-celled epithelioma, examined for purposes of comparison, offer appearances very similar to the psorosperm-like cells of these cases. Moreover, I have found in a specimen of verruca vulgaris round cells in the rete Malpighii, considerably larger than those surrounding them, containing a nucleus more or less well defined, of a glistening appearance, and with an apparent retraction of the protoplasm from the periphery, so that nucleus and protoplasm appear as if surrounded by a clear space. In the hypertrophied horny layer above, the outline of these bodies, unstained by the alum carmine, could occasionally be seen. These bodies presented many points of analogy with those found in the two cases, as was readily acknowledged by all to whom I showed these specimens. Are we to regard these also as a species of psorosperms?

Attempts were made to obtain some further light by cultures on agar plates, in water, and in bouillon, but with no result. Inoculation experiments were also made on animals, but these too have been entirely negative up to the present time. Lastly, I have to record my failure to produce a differential or distinctive staining of these bodies.

It can not be denied that many good reasons have been offered by the admirable paper of Darier for considering it not improbable that these bodies may be proved to be coccidiae. So little, however, is known by zoölogists of this class of parasite, and its organism is so low in the scale (differing as it does so slightly from a tissue cell), that we are justified in demanding strong proof before fully admitting that the peculiar cell-forms in question are to

* "Vierteljahresschrift für Derm. und Syph.," 1888, 4. Heft.

† "Traité descriptif des maladies de la peau," Paris, 1889.

be placed here. We can not, therefore, accept their parasitic nature as beyond all doubt until some positive proof is offered by culture or inoculation, or at least until some further analogy with the sporozoa can be shown.

Very truly yours, JOHN T. BOWEN.

The following questions naturally suggest themselves in our study of these cases in attempting to form a positive conclusion as to their true nature :

1. Have the bodies in question been found in every case of this rare affection?

As they have occurred in all four instances—the two cases reported in Paris and the two described by myself, which have been observed since attention has been especially called to their presence by Darier—it would be fair to assume that they will be found in all future cases.

2. Do they occur in every affected follicle—that is, in all the lesions of the disease?

This is a question of most important bearing upon their ætiological relations. Of course, a positive answer can not be given to it in such a case as my first one, because it presented myriads of lesions; but, inasmuch as they were found in every one of the many examined and in every phase of their development, as well as in those of the other patients, it may be assumed, perhaps fairly, that they are uniformly present.

3. Are these bodies parasites?

This question must be settled by the histologist and zoölogist. Several distinguished dermatologists at the Paris Congress—men like Unna, for example, who are thoroughly familiar with the minute anatomy of the cutaneous tissues in health and disease—told me that they must so regard them; but their opinions were based upon a mere inspection of the microscopic sections on view. My colleagues in the anatomical and pathological departments of Harvard University, also well acquainted with the minute appearances of human structures, hesitate to pronounce them of extraneous character. Prof. Joseph Leidy, of Philadelphia, than whom no one is more competent to express an opinion upon their nature as a zoölogist, has very kindly examined specimens of the lesions from both my cases. He writes: "I have examined your preparations of the skin and have observed the large, nucleated cell-bodies in the epidermal layers, but feel uncertain as to their true character. They may, perhaps, be of the nature of psorosperms, to which they bear a resemblance, but I am not satisfied that they are such." It seems to me that Dr. Bowen very fairly states the uncertainties which surround the positive settlement of this question. No definite inference upon this point can be drawn, I think, from the action of parasitocides thus far used in the treatment of these cases.

4. Do these bodies cause the tissue changes in the disease in which they are found?

If we look upon them as parasites and not the product of the disease, there is no improbability in regarding them as its cause, in view of the much more serious and complicated modifications of cutaneous tissues which foreign organisms of much less magnitude and simplicity of structure are capable of exciting—the bacilli of leprosy and tuberculosis, for example. On the other hand, we should not forget that animal parasites of relatively high organization—the *demodex folliculorum*—may inhabit the orifices of the sebaceous glands indefinitely without producing any recognizable tissue change.

5. Are these bodies communicable from one person to another? Is the affection contagious?

Our evidence upon these points is wholly of a negative character. The experiments made by Darier to establish new colonies of the bodies upon other animal tissues failed uniformly, as did those of Dr. Bowen in this direction. That they might readily be transferred from an affected follicle to adjoining follicles in the processes of washing the skin, scratching, or by the clothing, may be easily understood; so that, in time, animal parasites without power of motion, like the mycoses, could affect the whole surface, as in my first case. We have no clinical proof of the transference of the disease from one person to another, although two of the four cases under consideration were affected husbands living with their wives. Such negative data are of little value, however, upon the point under consideration. It is well known that tinea versicolor may affect one of a married couple for many years without being communicated to the other.

6. Are these bodies found in other dermatoses?

If it can be shown that they are found in other diseased conditions of the skin in which the characteristic tissue changes are wholly unlike those of the affection under consideration, or that their occurrence in healthy follicles shall be found to be by no means rare, then grave doubts might well arise as to their pathognomonic relation to our cases. It has been above noted that the peculiar bodies found in molluscum epitheliale or contagiosum, as to the nature of which much diversity of opinion has long prevailed, are regarded by Darier and others as coccidia also, and that Dr. Wickham claims that similar bodies are found in and are the cause of Paget's disease. The cutaneous lesions in these three affections are certainly wholly unlike in a most significant degree. Dr. Bowen calls attention to the occurrence of cells, strongly resembling the bodies in question, in other diseased conditions of the skin. A too universal discovery of their association with dermal pathology should throw grave suspicion upon them as an aetiological factor in any single dermatosis.

The real nature of these rare instances of disease can not be regarded as definitely settled, in my opinion, or all the conclusions of M. Darier be accepted, until we have obtained more satisfactory information than we now possess upon the questions above raised.

DERMATOLOGICAL NOTES.*

By W. A. HARDAWAY, M. D.,
St. Louis, Mo.

SPONTANEOUS INVOLUTION OF SARCOMA.

AT the meeting of this association in 1882 I showed a patient and read notes of a case of idiopathic pigmented sarcoma of the skin. According to the microscopical examination of my friend Dr. Heitzmann, the growth represented the alveolar variety of the disease, and the prognosis, both clinically and microscopically, if I may use the expression, was of a most gloomy sort.

As the case was published in full in the *JOURNAL OF CUTANEOUS AND VENEREAL DISEASES* for January, 1883, together with a capital chromolithograph, it will not be necessary to go over the details again. Suffice it to say that the lesions were numerous on the face, hands, and feet, and were deeply pigmented; moreover, there was swelling of the lymphatic glands, those at the elbow being the size of pullets' eggs and quite visible. The disease had then been in existence for eight or ten years, and showed here and there points of involution. In a supplementary report, made in 1884,† I stated that a number of new deposits had occurred, notably on the backs of the hands and feet. A recent inspection of this patient develops the interesting fact that fifteen or sixteen years from the beginning of his disease he remains in good health, that the active process has apparently ceased, and that the sarcomatous growths in the skin have undergone complete involution, leaving behind merely an atrophic condition in their stead. It may be stated that the patient has never received any treatment.

DISAPPEARANCE OF EXTENSIVE ERUPTION OF XANTHOMA.

In a paper read before this association in 1884 I reported a case of "Multiple Xanthoma, exhibiting the Plane, Tubercular, and Tuberosc Varieties of the Disease."‡ This was the most extensive and exaggerated example of xanthoma that I had ever seen, and I believe, in some respects, without a parallel in literature. In addition to the widespread involvement of all parts of the body with the plane, tubercular, and tuberosc lesions of the affection, there existed a most curious zosteriform arrangement of tubercles, or rather papules, in the intercostal region of the right side. I have memoranda of the case, showing the gradual involution of the disorder, but, without taxing your patience further in the matter, I may add that in

* Read at the annual meeting of the American Dermatological Association, September 19, 1889.

† "*Journal of Cutaneous and Venereal Diseases*," October, 1884.

‡ "*St. Louis Courier of Medicine*," October, 1884.

about four years from the time that he came under observation the xanthomatous lesions have undergone complete involution. The peculiar bronzed hue of the skin, which has always been an interesting feature of his case, still persists.

CASE OF PEMPHIGUS FOLIACEUS.

There is nothing especially noteworthy in the history of this case beyond the comparative rarity of the disease. The disorder occurred in a gentleman of sixty-six years, began on the chest, and looked in the beginning like an *eczema rubrum*. From my notes taken at the time I shall briefly summarize a few of the more interesting points in his history:

"The whole of the face was red and eczematous-looking when the patient first came under observation, and up and down the trunk were numerous exuding red places with adherent epidermic flakes, and about the lumbar spine some irregular flaccid bullæ. Finally, after repeated outbreaks of blebs, which were always preceded by a chill, the whole body, with the exception of the palms and soles, was affected, giving the patient the appearance of one who had been dipped into a vat of boiling water. The mucous membranes of the mouth and throat were affected, the nails were cast off, ectropion was established, and the hair remained only in tufts and patches. What may be called the 'wet stage' of the disease lasted altogether about one year, at first making but slight headway, and apparently interfering but little with the general health; but toward the end of this time the chills became more frequent, the successive formation of blebs more rapid, and within six weeks the various points of attack coalesced from extension of the process, and not a portion of the entire surface escaped. In the course of time the skin assumed a violaceous hue, free scaling constantly occurred, and when the patient was last seen he presented all the typical features of *pityriasis rubra*. A few of the special symptoms of the 'wet stage' may be noted. The patient would feel very itchy at a certain point, and, upon rubbing the part to allay the pruritus, the skin would slip from under his finger and display a moist, red, and exuding spot. In many instances the development of blebs would be announced in this way. Some of the bullæ were tense and full, like those of *pemphigus vulgaris*, but these never appeared in the neighborhood of the typical lesions, but always at a distance. In some instances contiguous blebs would run into each other; in others, new, small blebs would arise in the periphery of older ruptured lesions, and thus undermine the space between the affected patches. Some of the bullæ were purulent, but in most the contents were clear. When a blister first broke, the exposed part would exude a clear serum, and the floor of the lesion would be bright and glistening, but after a short while the secretion would become viscid and eventually dry into doughy crusts. In this way the different surfaces of the body would present very dissimilar aspects, varying in appearance according to the progress of the disease in one place or another. After the exfoliative dermatitis was established no new bullæ developed, at least for the year that he remained under my care. I subsequently lost sight of the case, but I understood five years afterward that he was still living, but was excessively feeble and emaciated, and still in the condition of *pityriasis rubra*."

LICHEN RUBER.

Mrs. M., aged fifty, when first seen presented the following appearance: From the feet up to the waist, and from the hands to a few inches beyond the elbows, the surface was red, scaling, and infiltrated. The skin of the palms and soles was enormously thickened, dry, harsh, and fissured—so much so, indeed, that the use of the members was attended with pain and difficulty. The nails were brittle, pitted, and lifted from their beds by the subungual thickening. Without making a further investigation, one would be satisfied that the condition present was a chronic exfoliative dermatitis, but a closer inspection showed that, while on the greater portion of the limbs the skin presented a uniform dark-red, infiltrated, scaling surface, as the borders of these most highly involved areas were reached this uniformity of appearance was somewhat gradually lost.

It is apparent that the eruption is made up of certain more or less distinct elements, arranged in rows or lines; and, further out still, the papules, for such they are seen to be, become more and more individualized, and finally perfectly discrete. What is so graphically described by Taylor is seen to great advantage here—namely, that the very earliest lesions are minute pin's-point spots, which give a roughened feel to the skin. Where the papules are older they are rounder, dark red, and covered with scales, and where they are more closely set they become flatter,* and, after reaching full maturity, are about of the diameter of a line. The evolution of the lesions shows no aberrations—that is to say, where the papules are miliary and conical no obtuse or flattened papules are to be seen, and among the older lesions none of the elementary forms; in other words, the march of the affection is steady and progressive, and, after reaching a certain stage, the papules undergo no further individual growth, but become finally, yet gradually, merged into solid sheets of infiltration. It may be said that the whole cutaneous surface of this patient is involved—from the waist downward, and from the elbows downward, an exfoliative, infiltrated condition of the skin; and from those regions upward—viz., the upper arms and the trunk—a papular eruption in different degrees of distribution and development. The face showed no papules anywhere, but it is somewhat red, and especially over the brows the redness and desquamation is most marked. Considerable dandruff on the scalp. There is much complaint of burning and itching about the buttocks and over the sacral region; otherwise the chief trouble would seem to be the sensation of excessive dryness and roughness of the skin, as perspiration is almost absent. The disease has now been in existence for about eight months, and the patient has materially improved under treatment, but up to this time she had been in a very pitiable condition, and, with progressive loss of flesh, sleeplessness, general debility, and great mental despondency, was rapidly tending toward a marasmic state.

* I can not say that any special depression was to be observed in the centers of the papules.

BULLOUS ERUPTION IN A CHILD.

Mary L., aged eleven, an inmate of the Augusta Hospital for Children, had measles some four years before I first saw her. According to her mother's statement, this present eruption developed one month after she had gotten well of the measles. During all this time the bullous eruption from which she now suffers had persisted. The day she came under my observation the skin of nearly the whole body was found to be rough, shreddy, and scaly, this condition being most marked on the limbs and neck. Without the history of the case, the child looked as if she were at the fag end of an attack of acute dermatitis of some sort. Under emollient applications the integument gradually became somewhat more normal—that is, grew smooth, although remaining slightly red. In about two weeks, when I saw her again, I found her in the initial stage of one of her recurrent attacks. On inspection, it is found that the whole body is covered with a series of bizarre red, raised lines of barely a line in width. These lines are clearly marked off from the surrounding skin, and tend for the most part to a circular arrangement. Presently the red lines vesicate, and often healthy areas of skin will be inclosed by variously shaped linear vesicles or bullæ. From these red lines erythematous limbs or processes are sent out, and not uncommonly these coalesce and form large bullæ. In other instances, after an oval linear bulla has formed, the unaffected central area will become undermined, and the whole lesion will become merged into one bleb. The lines, with their processes and ramifications, form the starting-points of the greater part of the lesions, but sometimes a small, pea-sized bleb will spring from a red erythematous spot, which may or may not go on enlarging. The contents of the lesions follow the usual course; the contained liquid, at first clear, finally becomes straw-colored. The blister-roofs were generally ruptured purposely, sometimes accidentally. Subjective symptoms, beyond great soreness in the bullous stage, were not marked. The internal use of arsenic has a most marked modifying effect on the eruption, both retarding its appearance and lessening the size and extent of the efflorescences.

A CASE OF LUPUS ERYTHEMATOSUS OF THE FACE AND ORAL CAVITY.

By GEORGE HENRY FOX, M. D.,

Professor of Diseases of the Skin, College of Physicians and Surgeons, New York.

LIZZIE R., aged eighteen, came to me in June, 1888, with an eruption upon the nose and cheeks of three months' duration. A strong application of salicylic acid had recently been made, and upon first examination it was difficult to say whether the case was one of erythematous lupus or of seborrheic eczema. Indeed, the occurrence of a moist and crusted eruption about the ears, and the rapid improvement in the appearance of the face consequent upon a regulation of the diet and a soothing application, led me to believe for several months that it was eczematous in character. But the

surprising obstinacy of the eruption, the frequent occurrence of erysipelatos inflammation, and a dry, pitted appearance of the cheeks, finally led me to the conclusion that I had made a mistake in diagnosis. The patient was now admitted to my service at the Skin and Cancer Hospital as a case of lupus erythematosus of the acute, disseminate type.

In the hospital the facial eruption improved, but her general condition, which had been poor from the outset, grew even worse. She suffered from retarded menstruation which seemed to give rise to the recurrent erysipelatos attacks. During one of these the hard palate became the seat of intense congestion with superficial ulceration. The patient complained of a constant discharge from the posterior nares and had frequent attacks of epistaxis. The eruption at this time developed also upon the fingers.

During this summer, the patient having left the hospital, the face improved and the oral lesions nearly disappeared, but in September the eruption upon the face became aggravated and extended down below the margin of the jaw and also upon the ears. The surface of the skin again presented the peculiar pitted appearance, the numerous slight depressions looking as though minute crusts had just fallen from them. The scalp was free from eruption, although the hair had fallen steadily since the beginning of the attack. The lips were slightly swollen and crusted. Upon the mucous surface small, whitish oval patches were seen upon the lower lip, and larger confluent patches upon the upper lip. The tongue was flabby, with a very thick, yellowish-white coating and a notched margin. The hard palate was covered, as before, with a red, patchy, slightly ulcerated eruption. This painful condition of the mouth was alleviated by the free use of peroxide of hydrogen, but grew worse after a few quarter-grain doses of calomel, the increased foetor of the breath and tenderness of the gums indicating an approach to salivation.

Upon sending recently for the patient with a view to making a more careful examination of the oral cavity as the basis of a report upon the case, I learned from her family physician that she was suffering from acute pulmonary disease which in a few days proved fatal.

In connection with this case it may be remarked that the relation of *lupus erythematosus* to *lupus vulgaris* has long been an unsettled question in dermatology. Although a certain kinship may exist between them, it is generally admitted that they are clinically distinct affections. The application of the name lupus to both is to be regretted, as it has led many into the erroneous belief that the two affections are simply varieties of one disease.

Whereas *lupus vulgaris*—*i. e.*, the ordinary tubercular form of lupus—is not infrequently observed upon mucous surfaces, a case of lupus erythematosus of the oral cavity has never been reported in this country, so far as I am aware. The rarity of such cases is amply shown by the fact that most dermatological authors do not even mention their occurrence, and the cases reported by European observers are extremely few. Neumann speaks of erythematos lupus on the vermilion border of the lip; Viel,

upon both lip and eyelid; and Kaposi, upon the hard palate and inner surface of the cheeks. The latter author, in his excellent chapter on erythematous lupus, speaks of having seen three cases in which the eruption upon the face was accompanied by an analogous condition of the oral cavity which proved to be quite as rebellious to treatment as the cutaneous affection. The termination of these cases is not mentioned, but reference is made to eight cases of the disseminate form of the disease accompanied with erysipelatous inflammation (*erysipelas perstans faciei*), of which four died of pneumonia.

Kaposi divides erythematous lupus into two forms—the discoid, or more common variety, and the disseminate and aggregated form, which is comparatively rare. It is in connection with this latter form of the disease that lesions upon the mucosa of the oral cavity are likely to be observed.

The crusted appearance of the eruption, which is peculiar to this form of the disease, presents a strong resemblance to eczema, and is apt to lead to a mistake in diagnosis.

Two other peculiar features are the recurrent attacks of erysipelatous inflammation and the tendency to a fatal termination by the occurrence of acute pulmonary disease. In these two respects the case reported presents a notable similarity to those recorded by Kaposi.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

193D REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Lichen Planus.—DR. FULLER presented a case of lichen planus with the following history: A patient with a case of the above affection came to me for treatment on October 5, 1889, at the New York Dispensary for Diseases of the Skin. The history of the patient is as follows: Mary C., single, Irish, forty-nine years of age, domestic, figure tall, development medium, eyes gray, hair dark, general health good. The present eruption is the first skin disease she has had to her knowledge.

The present disease made its first appearance early in July last, when the patient noted a very fine eruption upon the flexor surface of the wrists. These aggregated points or papules gradually enlarged until they became the size of a pin-head. They were round and discrete; their surface flat, hard, and smooth; pinkish in color. This stage of their development was attended with pruritus, which was constant, and increased when overheated. Similar papules, but less aggregated, soon appeared upon the flexor surfaces of the arms and forearms, and also over the manubrium and the lower cervical ver-

tebræ. Six weeks later, or about the middle of August, the papules, aggregated in patches, appeared on the flexor surfaces of the knees and calves of the legs, also attended with marked pruritus. The eruption, more sparsely distributed, next appeared upon the abdomen, buttocks, and anterior surface of the thighs; and in the latter part of September upon the dorsal surface of the feet.

On examining the patient early in October, I found the eruption, as a whole, to be symmetrically distributed upon the upper and lower extremities, abdomen, and buttocks, the face and neck being free, and also the thorax, except the parts previously referred to. An exception was noted on the calves of the legs, the eruption on the right being more severe and aggregated. The eruption consists of papules, which vary in color from pinkish or reddish to violet-red, and in size from one to two lines. The smaller papules are irregularly rounded, while the larger ones are slightly angular in outline, with a surface hard, smooth, and shining; the tops are only slightly elevated and have a flattened surface, or show the characteristic depressed center; these umbilicated centers are to be seen especially in those distributed about the anterior surface of the wrists. Decided pigmentation was not yet present.

The distribution of the papules is mostly discrete, in parts sparse, but in localities, such as about the wrists and knees, they aggregate in patches or groups; and on the upper third of the anterior surface of the right thigh they are arranged in nearly a straight line.

The patient says that flashes of heat first began to trouble her in the summer of 1888, and they returned the following May. The heat flashes were present in the day-time and at night, and were followed by general free perspiration; they continued up to the time when the eruption made its appearance; afterward they gradually lessened, and entirely left her in the middle of September. Her menses had been regular up to last February, when they suddenly ceased. The patient had enjoyed good health until last winter, when she noted a weakness in the back, in the lumbar region. At this time she also suffered from constipation; it had not troubled her previously, but has been aggravated since the appearance of the eruption. In temperament the patient is slightly nervous, and in circumstances has had, for some time past, considerable worry over family relations.

In these facts, and the functional disorders incident to the change of life, is to be found the probable causation of the instance of the disease above specified.

The treatment employed, followed by rapid improvement, was largely constitutional, the local treatment being limited to the relief of the only subjective symptom present—namely, pruritus—by the usual soothing applications. The constipation was removed by laxatives. A diuretic alkaline mixture of acetate of potash and sweet spirits of nitre was also prescribed. Change of residence and relief from worry have had a beneficial effect. Under such treatment this inflammatory eruption, usually chronic, is gradually disappearing, and there are indications of a favorable prognosis.

A Case for Diagnosis.—DR. KLOTZ presented a case for diagnosis with the following history: Jacob W., fifty-one years of age, born in Germany, a

cabinet-maker by trade, applied at the German Dispensary November 12, 1889. He is a man of strong physique, not looking older than he really is. Except several attacks of rheumatism, one of which, sixteen years ago, kept him in bed for fourteen weeks, his general health has been good. Since about a year, however, he has been suffering from pain in the right thigh, extending downward on the frontal aspect of the extremity from the lumbar region, avoiding the tract of the sciatic nerve, which has rendered him unfit for work.

Since about ten weeks he has noticed the appearance and gradual growth of a red spot on the left temple, and of a smaller brownish spot on the right side of the nose, which both cause considerable burning and itching. Since about four weeks it seems that both lesions have not increased any more, but itching and burning continue.

On the left temple there appears a well-defined, smooth patch of a peculiar bluish-pink color, of regular oval shape, the long vertical diameter about one inch, the small horizontal one about half an inch. The patch is slightly elevated above the surrounding healthy skin, rising sharply, but not abruptly, to a thickness of about an eighth of an inch. The surface is smooth, and does not show any alteration of the epidermis; it can be moved over from the underlying tissue and can be lifted up in a fold without any difficulty. While not being hard, the tissue feels resistant and somewhat elastic, and seems to occupy the corium without affecting the subcutaneous tissue. Touching, folding, etc., do not cause any pain.

The spot on the right side of the nose is of irregular shape, about the size of a penny, of a brown-red color, not attached to the underlying parts, showing slight infiltration of the cutis. The surface is free from scales or crusts, but bears slight indentations of the epidermis. It is not sensitive or painful.

Before applying for treatment at the dispensary the patient had used some plaster which seemed to have irritated the surface and to have produced some scaling. Since the 12th of November he has been taking five milligrammes of arsenic acid once or twice a day. It is intended to use arsenic in subcutaneous injections unless improvement takes place very soon.

DR. PIFFARD suggested that the case presented by Dr. Klotz for diagnosis might be a beginning mycosis fungoides.

DR. BRONSON thought the disease was sarcoma.

DR. KEYES agreed with Dr. Bronson in the diagnosis of sarcoma.

DR. ELLIOT also diagnosticated the disease sarcoma.

DR. KLOTZ said the case had greatly puzzled him, but he was inclined toward believing it a sarcoma, and had put the patient on arsenic internally. If the disease did not improve, he would inject Fowler's solution into the lesions.

Elephantiasis.—DR. FULLER presented a case of elephantiasis in a German aged fifty-one years. Until this disease appeared his health had been excellent. The disease had commenced as a swelling of the left foot about eight years ago, attended with the usual symptoms. The disease gradually extended up the leg, reaching the knee in about six years, and in the past two years extending up the thigh until it now reached the crest of the ilium. About five months ago ulceration appeared just above and behind

the inner malleolus, which has slowly increased in size, forming a deep ulcer nearly three inches in diameter.

DR. PIFFARD said the case was a very interesting one, as there was no previous history of acute attacks of erysipelas or lymphangitis. In this connection he would like to speak of two cases of elephantiasis occurring under his own observation. Both patients were oystermen, had always lived in this country, and there was no exciting cause that he could learn for the disease. Possibly their occupation may have had something to do with it.

DR. BRONSON referred to a case that occurred in Charity Hospital, and which in appearance was strikingly like the one now presented. The leg was amputated in the case referred to. There was nothing in the gross appearances of the amputated leg indicative of lymphatic engorgement, and the enlargement seemed to be due to increase of areolar tissue. Subsequently the same disease attacked the other leg. Neither in this case nor in the one presented did the speaker believe there was any reason for suspecting the presence of filaria.

DR. ALLEN said he had operated on a case of elephantiasis with chetiolosis, and found that the amount of serum present in the diseased tissues varied very much from day to day. Sometimes large amounts of serum would flow from the needle puncture, and at other times little or none. He was now treating a case with massage and graduated pressure from below. Rubbing and kneading would keep the lymph channels and vessels open, while bandaging would hasten absorption.

DR. KLOTZ thought, although there was no clear history of syphilis in this case, that syphilis might produce such a condition of elephantiasis as a consequence to disease of the blood-vessels. He had published a case very much resembling the one presented to-night ("Transactions of the Ninth International Congress," 1887, and "New York Medical Journal," Oct. 8, 1887) in which he believed the ulcers were caused by gangrene owing to syphilitic endarteritis.

A Case for Diagnosis.—DR. FOX presented a case for diagnosis with the following history: Patient aged forty-four years. Eruption of four years' duration. Large, reddish-brown, infiltrated patches with a sharply defined margin occupied the axillary and genital regions, while upon the trunk were yellowish-brown discolorations resembling the patches seen in macular leprosy. In the midst of the infiltrated, as also the smooth discolored patches, were circular and irregular islands of normal skin.

DR. PIFFARD said he considered the disease *eczema marginatum* as described by Hebra. There was certainly an eczematous element present, for the lesions were moist in places, and showed the presence of catarrhal inflammation.

DR. BRONSON strongly objected to the diagnosis of *eczema* in this case. The disease might be parasitic, for certainly its sharply defined margin and apparent mode of extension would suggest the growth of a parasite: but in that case the growth must have been below the epidermis, which evidently was not materially affected. There was no such impairment of the epidermis as would appear were the disease *eczema*. The seat of the disease seemed

to him clearly in the connective tissue, and could not properly be called a catarrhal affection.

DR. ROBINSON would consider the case as one of parasitic eczema or seborrhœal eczema with some of the symptoms absent.

DR. ALLEN said some of the features of the lesions, especially the color and infiltration of those on the left arm, looked very much like leprosy, as did also the large brownish plaque on the chest.

DR. KEYES diagnosticated the case as eczema. Weeping was now present in places, and had been much more than at present, according to the patient's own statement.

DR. R. M. FULLER diagnosticated the case eczema. There was no doubt in his mind that the lesions as they appeared on the surface of the scrotum were eczematous.

DR. ELLIOT said that although some of the lesions now looked eczematous, yet, from two cases that he had had the opportunity of observing for a long time, and which were in the same stage of the disease, he considered it mycosis fungoides.

DR. JACKSON thought the islands of normal skin in the lesions, and their peculiar pink color, pointed toward mycosis fungoides.

DR. FOX also believed the case to be one of mycosis fungoides, from the presence of the islands of normal skin in the lesions, and the pigmentation, size, shape, and tumefaction of some of these lesions. In from three to six months he believed the tumors would increase in size and number, as the patient's general health was beginning to suffer. The case presented an entirely different aspect when examined by daylight.

DR. PIFFARD presented photographs of a case which presented the features ascribed by the older writers to "pemphigus pruriginosus," namely, a vesiculobullous eruption accompanied with pruritus, hyperpigmentation, and pain in the lower extremities. The case was presented with a view of eliciting opinions as to a suitable name to be applied to it, as it was manifestly not a variety of pemphigus proper. It might by some be included among the comprehensive collections of diseases which Duhring calls dermatitis herpetiformis, most of which, however, are not herpetic in character. Dr. Piffard expressed an unfavorable prognosis as to the case in question, and believed its origin was to be sought in the central nervous system.

DR. BRONSON would take exception to the term "dermatitis multiformis" proposed by Dr. Piffard on the ground that it was not sufficiently distinctive. There were various kinds of dermatitis which were attended with multiform efflorescences—the syphilodermata, for example. To be distinctive, the name of the affection should, so far as possible, express the nature of the disease. Unquestionably the affection in question was of a neuropathic nature, and the expression of this character in its name would be of much greater importance than simply to indicate the multiformity of the lesions. Such a term as "dermatitis neurotica universalis," for example, would more definitely denominate the disease than the one which had been proposed. It was not intended, however, to propose any new name for Duhring's disease, but, if a new term were to be adopted, to indicate what principles should be considered in the selection.

DR. FOX said that he considered the term hydroa was a very good one to apply to such vesicular and bullous eruptions.

Erythema Multiforme affecting the Oral Cavity. — DR. FOX showed a water-color sketch of a case of erythema multiforme (herpes iris) on the hands and arms, which also appeared on the mucous membranes of the oral cavity—the first of the kind he had ever seen.

Selections.

Neurosphilides and Neuroleprides.

DR. UNNA, in an interesting paper read at the late Dermatological Congress in Paris, presents his views and observations upon lesions of the skin, both in syphilis and in leprosy, which depend upon nerve changes and differ from common sphilides and veritable lepromes. Five years ago his attention was first called to the question by observing a patient whom he had treated two years before for a primary syphilis. Directly after a course of mercury for the cure of mucous patches several red circles, from the size of a franc up to that of a five-franc piece, showed themselves in a symmetrical manner upon the radial side of both forearms. The breadth of the circle was about one centimetre, and the inclosed free center measured from four to six centimetres; the color was bright rose, which became darker and bluer when rubbed or exposed to cold. Subsequently spots of the same color appeared, and, like the circles, were not raised above the surface and showed no trace of infiltration. Pressure caused the redness to disappear, leaving a slight yellowish pigmentation. There were no subjective symptoms. Local anti-syphilitic medication had no effect on the lesions, which only disappeared finally after several months, and often, when they had almost vanished, removal of the clothing in a cold room would serve to bring them out again. A year and a half later, after a period of good health, the same form of lesions developed for a second time.

The points of interest are: 1. The appearance of roseola-like spots in the latter part of the secondary period. 2. The tendency to persist at the same point, with no tendency to extend. 3. The persistence in spite of external and internal anti-syphilitic remedies. 4. The augmentation and diminution of the erythema, spontaneously or by reason of irritants and cold. To these features, which distinguish the condition from syphilomata, are added the clinical observations that: 5. These circles and spots of the late secondary period at times change into a papular syphilide presenting the same clinical features, remaining at the point of development, long duration, and the lack of influence exerted by ordinary anti-syphilitics. 6. These lesions leave behind them identical pigmentations in the form of spots and circles which may be accompanied at the same time by the usual annular pigmented syphilide.

The author believes that lesions of the same appearance as those above

described have already been known to exist in skin pathology, notably in lepra of the nerves, first called to his attention by Boeck in 1881, and subsequently confirmed by bacteriological examination; bacilli never being found in these vaso-neurotic circles and patches, which, however, depend upon lepromata of the nerve tissue. Microscopical specimens were shown at the congress to demonstrate that the papules of this form of syphilis present the features, rings, and patches in the corresponding form of lepra. There is no emigration of white blood-globules of the blood, no infiltration of migratory cells in the epithelium, but, on the contrary, we see at the commencement a dilatation of the vessels of the skin and an increase in the fusiform cells of the adventitia tunic. At this moment the skin is transformed and presents, from a clinical point of view, the appearances of an erythema. In following the course of the disease, the vessels appear more hyperplastic, show cord-like thickenings composed almost exclusively of fusiform cells, their lumen is large, and the whole is clearly detached from the healthy parts of the skin; at this point the erythema begins to become papular.

Finally, at the culminating point of the disease the hyperplasia invades the tissues which surround the vessels, especially in the papillary bodies, and soon all the elements of the skin are invaded by hyperplasia without any preceding inflammatory phenomena. There is a true hypertrophy of the skin of a cellular character, simply the result of a prolonged exaggeration of nutrition. In the nutrient vessels the blood flows more quickly, so that the tissues of the skin increase little by little. The vessels then become hyperplastic and the cellular hyperplasia extends gradually into the cutaneous tissue. The skin thickens, becomes harsher, and preserves at the same time the character of the paretic circulation.

The author refers to his previous demonstration that among the exanthemata of the skin we must distinguish two varieties: 1. Those which, connected with the distribution of the vessels of the skin and with their dimensions, reflect this disposition under various forms but in an exact manner. 2. Those (the more numerous) which, without having any connection with this fixed arrangement of the vessels, begin in any part of the circulatory system and develop from here in an illimited concentric manner. We can name the first small class that of the neurotic exanthems, and the second that of embolic or infectious exanthems. Lepromata of the skin (*lepra tuberosa*) belong to the second group, and the exanthemata accompanying the lepromes of the nerves (*lepra maculosa*) to the first group. The author has shown that to fully understand the exanthemata of the first group we must consider that the vascular cones of the skin reach the cutaneous surface in round or oval elements about the size of a lentil; that these rounded elements do not touch each other in an equal manner on all sides as in a mosaic, but leave between them square or triangular spaces of greater or lesser extent which are not provided with a direct supply of blood, but are simply filled by the *collateral* capillary vessels. This primordial discontinuity forms the base of peculiarity of such affections as annular roseola produced by cold, the exanthem of cholera, urticaria, etc.

In neuroleprides the clinical features indicate—by the symmetry of the spots, by the close relationship with the circulation, and by associate and

consecutive phenomena of sensitive nerve trunks—the neurotic, and more especially the angioneurotic, origin of the affection.

Histology supports this conclusion by excluding the structure proper to infectious granuloma and true leproma. Etiology finally shows the dependence upon the nerves of this exanthem of lepra by the absence of the specific organism of lepra in the skin. Thus we have the three groups which form the base of a pathological entity. Unfortunately, the case of neurosyphilides is not so clear. Till now the proof of the existence or absence of the syphilitic germ is wanting, but the other two groups of phenomena are so similar to those of neuroleprides that we may draw the conclusion that histological investigation will one day prove that in neurosyphilides the germ is not to be found in the erythematopapular portion of the skin, but indeed in the nerve trunks which supply the part. Both exanthems are independent of true infectious embolisms of the skin. Both show themselves under the form of roseola or of erythematous circles which finally change into spots and into circles of papular erythema. In lepra these cases are almost constantly met with; in syphilis more rarely. The large patches of discoid papular erythema, especially in lepra, may diminish and little by little become effaced at the periphery or in the center. These two exanthemata are distinguished by their persistence at the same place. They correspond with the circulatory elements of the skin and make the presence of the latter felt by an exterior manifestation. Pigmentation may be absent or the exanthem may become charged with it after a time. In hot climates the center of the lepra spot is often white like chalk, with pigmented margin, and this form is the only one which accords with biblical descriptions. This anomaly of pigmentation has long been known in syphilis because of its situation limited to the neck.

In the author's case the erythematous circles, which subsequently became pigmented, appeared upon the arm at the same time that the primary pigmented annular syphilide showed itself upon the neck, and it was impossible for him not to admit a common source in the nervous system.

The microscopical specimens show that the process described is not an ordinary inflammation of the skin, but a progressive change of nutrition, first of the vessels of the skin, and then of the neighboring cutaneous tissues, and especially of the papillary bodies. In the papular variety these bodies show hypertrophic tissue rich in fusiform cells.

In view of the complete parallel between the clinical features and anatomy of the two processes, the author does not hesitate to separate this syphilide into a group by itself, distinguished from other syphilides just as the exanthem of *lepra nervorum* is distinguished from true lepromata of the skin.—*Journal de médecine de Paris*, Nos. 43, 44, 1889.

The Injection Treatment of Acute Gonorrhœa.

DR. FRIEDHEIM, writing from Neisser's clinic upon the above subject, in the "Archiv für Dermat. und Syph.," No. 4, 1889, gives the results of a series of experiments carried out to determine the relative destructive powers possessed by a great variety of different local remedies against the gonococcus, as well as their influence upon the inflammatory condition and their efficacy

in causing desquamation of the urethral epithelium—and through the latter a mechanical elimination of the microbes. In twenty-nine cases corrosive sublimate was employed (1-10,000 to 1-15,000). In fourteen, treatment had to be intermitted because of the pain, difficult urination, bloody urine, œdema, or other ill effect, while in eleven instances this treatment had to be stopped altogether. In a second series of twenty-nine cases injections of 1-20,000 were used without necessitating any interruption, though some pain was caused by them. An addition of salt in a tenfold quantity caused a decrease in the irritant symptoms, but at the same time in the antibacterial effect. In the first series the gonococci were decidedly influenced in ten out of the fifteen cases in which treatment was continued, while in the second twenty-nine cases this influence was noted sixteen times.

As regards the rapidity of antibacterial effect, no remedy produced more rapid destruction of gonococci superficially situated than 1-30,000 sublimate solution, which caused their disappearance from the secretion, in many cases after four days' treatment, and often after a week they remained absent. In weak solutions this remedy acts as an astringent, and in strong solutions as a caustic, and only produces desquamation where irritation enough has been set up to produce shedding of a whole layer of epithelium.

In another series of twenty-nine cases the salicylate of mercury (1 in 270) was tried, and gave twenty-two positive results, so far as antibacterial effect was concerned, and was found but slightly irritating. Its action is somewhat slower than the sublimate, but more sure and lasting. Zinc, lead, and tannin were employed in a large number of cases without any positive antibacterial results.

Bismuth subnitrate and salicylate, in from $\frac{1}{2}$ to 10 per cent. were employed in twenty-six instances, with six positive antibacterial results.

Potassium permanganate (1-3,000 to 1-5,000), tested in seventeen cases, showed also six times a decided influence upon the gonococci. In stronger concentration an unpleasant irritative action was noted. The discharge was rendered decidedly thinner, and the number of pus corpuscles was decreased, but no great desquamation of epithelium was observed.

Resorcin, in from two to four per cent. solution, in twenty-two cases was found to have no great antibacterial or desquamative influence, but was exceptionally well borne.

Salicylate of soda (five to twenty per cent.) in twenty-six cases showed slight effect on the gonococci, with only five positive results.

Antipyrine (three to six per cent.) in twenty cases was found to exert but little influence on the cocci, giving but three positive results. Boric acid was equally devoid of antibacterial power.

Naphthol (1-1,000 to 1-100) in twenty cases showed but two results favorable to this drug as a destroyer of the gonococci. Carbolyzed lime-water (acid. carbol., 1·0 : aq. calc., aq. dest., $\bar{a}\bar{a}$ 50·0) gave four positive out of twelve trials, and, though without marked antibacterial virtues, was, however, found to be astringent and productive of marked desquamation.

Thallin sulphate was used, in five-per-cent. solution, sixteen times, with three antibacterial results, and in seven per cent. suspension ten times, with five successful results. The tartrate of equal strength, in eleven cases,

each gave two positive results for the weaker and six for the stronger solution.

And now we come to the most important portion of the paper—that relating to the observation upon *nitrate-of-silver* injections which have been for a number of years used in Neisser's clinic. Three hundred and eighteen cases were treated with this salt; examination showed that in two hundred and thirty-seven of them an antibacterial effect was produced, and the failures were attributed to inattention on the part of the patients who were treated in dispensary practice, etc.

Nitrate of silver increases the inflammation when used in strong concentration, but when in proper dilution decreases it, and at the same time a decrease is noted in the number of gonococci. In the Neisser clinic the treatment of acute gonorrhœa is begun at once with injections of silver, in concentration of 1-4,000, or, at most, 1-2,000, and, in spite of all attempts to find a better remedy, there must be accorded to this one the undisputed first place—even ahead of corrosive sublimate. In the first few days the discharge becomes richer, thicker, and more purulent, but after about four days the secretion becomes less, thinner, whiter, and contains more epithelium. The gonococci decrease materially in quantity, and may in a few days more disappear completely. The injections are made four to six times daily at first, and gradually decreased to one per diem, and this is best to continue for several weeks. In some individuals even weak injections (1-5,000) will not be well borne, and boric or antipyrine injections will have to be made before or after the silver, sitz baths and suppositories used, or the drug be given up entirely. In case of complications arising, the use of local remedies is not stopped at this clinic, as is usually the case, but antiparasitic injections are continued, especially in epididymitis. Complications are prevented in a measure, it is believed, by the antibacterial methods of treatment. Thus it is seen that, out of twelve hundred cases of gonorrhœa, epididymitis was present but one hundred and sixty-four times, funiculitis being noted in twenty-seven instances. Twenty-two times only did the epididymitis appear during treatment, and only once did it develop in the whole number of cases treated by nitrate-of-silver injections. In the remaining one hundred and forty-two cases the complications were present before treatment was begun. Other complications, such as bubo, prostatitis, cystitis, etc., if present at all, were so prior to treatment.

Microscopical control is imperative in carrying out this therapy in a rational manner.

Where in the Dermatological Practice of To-day is the Application of the Paquelin Cautey Unavoidable?

UNDER the above title Unna considers ("Monatshefte f. prak. Dermat.," Band ix, No. 9) the advantages to be derived from the use of the Paquelin cautey in a number of skin and mucous-membrane affections, among them eczema ani, scroti et vulvæ invaderatum, leucoplakia oris, and angiomata oris.

Eczema ani, etc.—It is a well-known fact that eczema about the anus and genitals of both sexes frequently resists all the well-known remedies that speedily cure the same affection on other portions of the skin.

This obstinacy to treatment is attributable in part to the proximity of the disease to a mucous surface and its irritating discharges; in part to its rich supply of nerves, rendering itching so pronounced a symptom, so that scratching and its effects make most of the remedial applications useless; in part, finally, because of the difficulty in applying remedies to these regions.

The majority of such cases may be cured by the application of well-adapted bandages, to which lotions or ointments have been applied, by cauterization with carbolic acid or corrosive sublimate, the use of cocaine, or especially with fomentations of very hot water.

When, in spite of all these remedies, the eczema becomes aggravated, the skin assuming, through the growth of connective tissue and epithelial proliferation, a cicatricial and warty appearance, the itching becomes unendurable, and the patient, through loss of sleep, physically and morally weakened, one should not hesitate to resort to local or general anaesthesia, and with a broad Paquelin burner slowly cauterize the affected parts, so that, were the proper remedies not applied immediately, a burn of the second degree would result.

Before the anaesthesia is over apply a five-per-cent. solution of borax, with or without the addition of cocaine, carron-oil to which two per cent. of carbolic acid is added, or two-per-cent. resorcin solution. The following formula is especially useful:

R Ol. lini,
Aq. calcis,
Zinc. oxid.,
Cretæ. 25·0
Iodoform. 5·0 to 10·0. M.

By means of the before-described treatment one can frequently, in fourteen days, cure, in these localities, an eczema of months' or years' duration.

Leucoplakia oris.—Unna had in former years made many attempts to cure this disease by the use of the most varied applications, and by the use of some of them accomplished quite satisfactory results; above all, by employing chromic acid on the plaques, and nitrate of silver and iodoform for the fissures.

In very mild cases the continued application of borax in the form of mouth-baths gave better results than the lately recommended Peru balsam, although one can not deny that this latter remedy may accomplish something.

It is, of course, understood that in applying all these remedies the most rigid abstinence from tobacco must be enforced, and that before all an anti-syphilitic treatment should have been employed.

The application of the Paquelin cautery, however, has accomplished more than all other methods. It should be employed after general anaesthesia, or in quite circumscribed patches after the use of cocaine. All of the diseased parts must be energetically touched with the broad Paquelin burner, especially the fissures.

When thin masses of horny epithelium are present, the crust produced by the first burning should be removed and the cautery again applied. In sclerosing glossitis and hypertrophy of the mucous membrane of the tongue, as seen in old syphilis, the Paquelin should be used in a still more energetic manner.

The after-treatment consists in the use of borax mouth-baths, which soften the mucous membrane and are cleansing and antiseptic. The patient should take a mouthful of the following solution :

℞ Borax 8·0
 Aq. dest.,
 Aq. menth. āā 100·0. M.

Retain it a few minutes, spit it out, and take another ; this procedure should be repeated for half an hour, and after two hours' interval another mouth-bath of half an hour's duration must be employed. As soon as the slough produced by the burning has separated, one may apply at night a two or three per cent. solution of nitrate of silver, and during the day continue the use of the borax solution to prevent a return of the disease.

Angiomata oris, etc.—Superficial vascular nævi which extend from the skin to the mucous membrane of the mouth, nose, etc., are more dangerous in the latter localities than on the skin, partly because hæmorrhage is more easily produced and can become very profuse, partly because in later years they may change into tumor-like angiomata. Here operations with the knife or galvano-cautery may give rise to profuse hæmorrhages. Caustics, as carbolic acid and chloride of iron, when painted on the surface, have an insignificant effect, and injections are dangerous. On the contrary, after previous use of cocaine, touching the surface of the nævus with the point of the Paquelin cautery slowly from the periphery to the center is as efficacious as it is free from danger.

In all other skin affections in which to-day the Paquelin is frequently used, other means as safe and good, if not always so rapid in their action, can be substituted.

In lupus it must compete with the sharp spoon and scarification, salicylic and pyrogallie acids. In old warty eczema spots and lichen patches of the lower extremities, as well as nævi flammei of the skin, the Vidal method of scarification is superior to the cautery. In lupus erythematosus the Paquelin has been displaced by simpler and milder methods.

Some Symptoms of Chronic Arsenical Poisoning.

DR. BROUARDEL and Dr. Pouchet, in a report presented at the International Congress ("Gazette des hôpitaux," Nos. 112, 113), speaking of the symptoms produced in acute and chronic intoxication by arsenic, mention lesions of the skin which are of interest and importance to the dermatologist. In one case of chronic poisoning observed by Dr. Vidal, at Hyères, the phenomena succeeded each other in the following order : February 8th, gastric disturbance and diarrhœa ; March 4th, *cutaneous eruptions* resembling urticaria and some resembling measles, spasmodic cough, nasal discharge, and weeping ; March 31st, pains in the lower limbs resembling acrodynia, *cutaneous hyperæsthesia*, and some days later paresis of the upper and lower extremities. One year later recovery was almost complete. The period in which eruptions predominate is thus seen to be in the second stage along with laryngeal and bronchial catarrhs. They may appear before the catarrh, or may only succeed it or show themselves in the succeeding stages characterized by disturbances of sensibility and paralysis. Redness and swelling

may occur upon various regions of the body, and are especially apt to affect the eyelids and scrotum. Various forms of erythema may appear at different points, and epidermic exfoliations of a furfuraceous or squamous type are not uncommon. Dr. Dubraudy has observed the shedding of one or more finger-nails, and others have noted the eruption of vesicles, vesico-pustules, rubeolic spots, and pigmented plaques. Still, none of these dermatoses seem to possess sufficiently characteristic and special features to permit of a diagnosis being based solely upon them. It is interesting to note that in autopsies recently made at Havre the presence of arsenic was demonstrated in the epidermis, the nails, and the hair. Sensations of a peculiar nature, referable to the skin, are at times described by patients poisoned with arsenic. Thus one patient complained that the skin over the calves and soles felt as though dogs were gnawing at it, and another that caterpillars were crawling up and down the back. In nearly all patients, at one time or another, the friction of the bed-clothes over the feet and limbs became insupportable. The general sensibility was not found disturbed in the cases observed; there was no true anæsthesia, but a diminution of sensation was often quite pronounced, especially about the feet and lower limbs, so that light pressure is at times not noticed. Sensibility is at times so altered in the upper extremities that the patient can no longer hold an object in the hand when the eyes are taken off it. Secretion from the skin seems at times to be augmented, especially in young people. Anaphrodisia was an almost constant symptom. Death usually took place by heart failure, attacks of dyspnœa being followed by fatal syncope.

In other cases the quantity of arsenic ingested may not have been sufficient to cause death within the few days succeeding its absorption, but anatomical changes are produced in the hepatic, renal, and muscular tissues, and the process can be compared to that from alcoholic intoxication, in which death is due to sclerosis of the liver or of the kidney long after the last dose has been taken. In suspected cases of poison, the urine for examination should be collected by the physician himself to prevent substitution. It has been shown by Dragendorff that arsenic may be found in the urine a few minutes after its ingestion. Analysis by Marsh's test is not difficult, and we have in it a valuable method of confirming our suspicions. The hair may likewise be examined. In one case one hundred grammes of hair produced an arsenical ring representing about one milligramme of the poison. A case is related (Gaillard's) in which a girl of twenty-two was given Fowler's solution for an eczema, in fifteen-drop doses, morning and evening, for fifteen days; then fifteen drops three times daily for another fifteen days; and finally twenty drops three times a day, at which dose she was to remain. When the daily dose of sixty drops was reached vomiting supervened, and the drug was suspended. Five weeks later Dr. Gaillard saw the patient, and arsenic could still be found in the urine. Paralysis had followed the vomiting, cramps and pains in the limbs, and had increased from the time the arsenic was withdrawn.

It has been shown that arsenic accumulates in a marked degree in the spongy tissue of bones, and becomes fixed there in such a way that its presence may be shown in the bones of the skull and vertebræ some time after

all traces of the poison have disappeared from the viscera, such as the liver. This localization in the spongy tissue is particularly marked and intense when the arsenic has been absorbed in small doses long continued. Arsenic thus localized is eliminated very slowly, and it may still be found in animals ten weeks after all absorption of the drug has ceased.

Book Reviews.

Atlas of Venereal and Skin Diseases, with Original Text. By PRINCE A. MORROW, A. M., M. D. New York: William Wood & Co.

WITH the receipt of Parts XIV and XV of Dr. Morrow's "Atlas" we have the completed volume before us, and it must be said that a work of this magnitude produced in so short a space of time (the numbers appearing monthly) reflects much credit upon both author and publisher. The evident careful attention bestowed upon the preparation of the text prompts me to first speak of this. Symptomatology, ætiology, pathology, diagnosis, and treatment have all been given due prominence, while especial attention has been paid to practical details in the various chapters, and an examination of the pages is sufficient to convince one that, as the author has stated in the preface, "no pains have been spared to bring the therapeutical part of the work up to the latest advances made in this department."

Part XIV opens with a chapter two and a half pages in length on *lupus erythematosus*, followed by four and a half pages of text devoted to *lupus vulgaris*, which subjects are beautifully illustrated by two female heads in Plate LXVI from the author's collection, showing the clinical features of the two varieties of the affection, while the succeeding plate presents an example of *lupus papillaris* of the hand and arm and a striking picture of a most remarkable case of *tuberculosis of the skin* which the author had for a long time under observation at Charity Hospital. A description of this disease and chapters on *sarcoma*, *epithelioma*, and *leprosy* complete the written portion of this number.

Sarcoma is illustrated by two figures in the next plate, one showing various-sized tumors scattered over the trunk in a somewhat aggravated form of the affection, the other from a case of Dr. Hyde, of Chicago, in which the growths almost completely cover the face and neck of an old man and give to him a most repulsive aspect. The following plate shows the great amount of destruction which may be produced in the region of the face by epithelioma. The case is one recently taken from life in a patient of Dr. Unna. Opposite it is a figure of a woman's head taken from Hutchinson's collection, showing a rodent ulcer occupying the region of the eye and forehead. In the last plate of this series we find the subject of leprosy beautifully illustrated in the figure of a gray-haired man, upon whose face and body are the evidences of the mixed macular and tubercular forms of this disease. A

second figure (after Leloir) shows an advanced instance of tubercular lepra, the skin of the whole face being raised in great folds of hypertrophic and infiltrated tissue.

The subject of leprosy is treated of at some length and in a manner which indicates that much concerning it has been derived from personal observation.

Passing to Fasciculus XV, we have before us clinical pictures of the parasitic skin affections. The same general excellence of the text is here noted which has characterized the work throughout. The first illustration, that of *scabies* (author's collection), is not altogether satisfactory. The patient stands so as to give a side view of the body, showing the lesions upon the hands and genitals as well as the trunk and thigh, and, while the distribution of the eruption is well shown, the artist has intensified the inflammatory redness of the papular lesions especially upon the hand, while he has not brought out with sufficient clearness the vesicular and pustular elements.

The lesions caused by the bites and irritation of the *pediculus vestimentorum*, as well as the consequent injury to the skin produced by the nails in scratching, are well illustrated in a figure from the Sydenham collection. A somewhat imperfect idea of the affection as it is usually encountered is conveyed by the picture of *chromophytosis* (after Piffard), and I fear few could make a diagnosis from it, as the spots are discrete, with a tendency to increase in number rather than to aggregate into large patches.

Trichophytosis of the body is typically portrayed in a reproduction from one of Hebra's beautiful plates, showing the lesions of *favus* upon the scalp of the same individual.

The best illustrations of this series, however, are those of *favus* of the body as well as of the scalp in a small boy and a case of *eczema marginatum* of the groin and axilla, both painted from life, in patients of the author. The volume closes with a very complete index. C. W. A.

Items.

Fowler's Solution.—Dr. G. Kassner says that in alkaline solutions of arsenious acid in the course of time a part of the arsenious acid is oxidized to arsenic acid. In the observation of Kassner, in eight weeks four per cent. of the arsenious acid present had oxidized to arsenic acid. The presence of a large amount of alkali favors the change. Hence it follows, to avoid mistakes one should never keep a solution of arsenious acid for any length of time, and that the quantitative analysis of older solutions only could be determined after previous treatment with sulphurous acid.—*Deutsche med. Wochenschrift*, October 24, 1889.

Sweat-bands of Hats may contain even twenty-eight per cent. of fatty acids which in summer may penetrate into the forehead and cause inflammation and corrode deeply into the skin. Rub with burnt magnesia every little while, so as to leave a small film on the band: wipe it off with a cloth before applying again.—*Prager med. Wochenschrift*, 39, 1889.

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Original Communications.

CLINICAL OBSERVATIONS ON INTRAMUSCULAR INJECTIONS OF INSOLUBLE MERCURIAL SALTS IN SYPHILIS.*

By HERMANN G. KLOTZ, M. D.,
New York.

IN inviting your attention to a report on my experience with the treatment of syphilis by intramuscular injections of insoluble salts of mercury, I am well aware that this method of treatment has never been regarded with favor by the medical profession of this country. In 1887 Dr. Bloom,† of Louisville, Ky., and Dr. Morrow,‡ of New York—the latter in a paper read before the New York Academy of Medicine—advocated its use, without, however, furnishing observations of their own actually made in America. Since then Dr. I. C. Wilson,* of Philadelphia, in a paper entitled Note on the Treatment of Syphilis by the Hypodermic Injections of Calomel, has published twelve cases from hospital and private practice. This, as far as I could ascertain, is the only American publication on the subject, as one by H. B. Deale, M. D.,|| of Washington, D. C., treats only of injections of soluble salts. It therefore does not seem inappropriate to give an account of similar work done by myself, while, at the same time, it becomes rather a duty to state the reasons for resorting to such treatment in the face of the disapprobation of able and experienced members of the profession. I do not want to take up your time by repeating what has been said in favor of such injections. Not only have

* Read before the American Dermatological Association in Boston, September 17, 1889.

† Medical Practitioner and News, Louisville, 1887, iii, p. 100.

‡ Medical Record, 1887, ii, pp. 501-518.

* Medical News, June 2, 1888.

|| Medical News, March 30, 1889.

numerous reports reached us from nearly all countries of the European continent extolling their value, but all the advantages have been clearly and definitely stated by the American authors already mentioned, and the pros and contras amply ventilated by several gentlemen engaged in the debate on Dr. Morrow's paper before the New York Academy. By some of these it has been maintained that treatment by injections ought to be a treatment of emergencies rather than of routine, and with them I agree on principle, although, perhaps, taking a somewhat liberal view of what constitutes an emergency. But, if it has been stated by others that they had always satisfactory results by the use of mercury and iodine administered by the mouth, or even by inunctions and fumigations, my own experience has taught me differently. Nor can I share the favorable opinion which repeatedly has been pronounced publicly—that syphilis is generally of a milder type in this country than anywhere else. To the contrary, I have found myself quite frequently confronted with cases where severe symptoms of syphilis were not affected by the usual methods of internal treatment, or returned obstinately and not rarely in more severe types during continued treatment. Inunction, although from a theoretical standpoint an inaccurate and hardly scientific procedure, has in practice undoubtedly stood the test of centuries, if properly and methodically applied. Still, even so, I believe that in the earlier stages its efficiency in regard to relapses is not so great as has been claimed. I have had ample opportunity to observe this fact during my service in the German Hospital of New York, where my colleagues resorted to inunctions almost exclusively, and where I could see the patients return with new and more severe eruptions about as often as after other treatment. But, if inunction is done by the patient himself—while he is following the vocations and avocations of daily life without prolonged rest in bed, increased perspiration, and restricted diet—I have almost always been disappointed in its effects. Fumigations are a very powerful method of mercurial treatment, but they are not without danger to the respiratory organs, and are by no means well borne in all instances. I will not leave unmentioned Zittmann's decoction, the value of which, however, is restricted to certain cases of inveterate syphilis, particularly to those of chronic ulcerative processes. So I tried injections of soluble mercurial salts, using a one-per-cent. solution of corrosive sublimate or, in preference, of the bichloride of mercury, which, while not more painful than the former, proved to be more effective in the earlier as well as in the later stages. These injections I have used quite extensively in my hospital practice with good results and without, as far as I am aware, causing the ill-will of the patients who were thus treated. In private practice I have tried them, too, occasionally; but here I found the necessity of frequent repetition, with incidental inconvenience and expense to the patients, a greater obstacle than the unavoid-

able pain. When, therefore, the method of Scarenzio was revived, beginning with Smirnoff's experiments in 1882, and soon followed by the introduction of the yellow oxide of mercury by Watraczewski, which allows of a smaller number of injections made in longer intervals, it seemed justified and advisable to apply the insoluble salts. A few experiments were made in the hospital, partly to get acquainted with the technical points of the procedure, but they were not followed up, not so much on account of the pain, but because the patients seemed dissatisfied with the long intervals between the injections, during which apparently nothing was done for them, and which they were inclined to consider as lost time. Nor was I anxious to introduce the method into my dispensary service, because I believe to be true what Dr. R. W. Taylor said before the New York Academy—that the patients ought to be both intelligent and impressed with the gravity of the disease to submit to the treatment. I remember only two instances in which I used injections of the yellow oxide; one patient was not willing to bear another injection; but the second one had three or four injections made, which cured him of an obstinate scaly induration of the palm with painful rhagades, which had persisted for several years, greatly impeding him in his trade as a cabinet-maker. In private practice, however, I found a more congenial field for the use of the stronger injections, owing to the presence of the above-mentioned conditions; and, while still continuing the internal administration of mercury and the iodides as the routine treatment, I have been able within the last three years to treat a limited number of patients, all males, by intramuscular injections of different insoluble salts, some of them almost exclusively. I have made altogether two hundred and ten injections on twenty-three patients—a small number, indeed, compared with the vast numbers of European reports. But the circumstance that nearly all of them have been under my observation for years, and that many are remaining under my care and supervision, I believe will, to a certain extent, make up for the small number.

The following table (No. I) exhibits the cases in chronological order, after the first injection made in each case, giving number, initials, age, nationality, time of infection, symptoms and treatment previous to first injection, time lapsed after infection and date of first injection, number of series and number and character of injections, time and date of each series, immediate local and general results, and effects on the symptoms and course of disease :

TABLE I.

No.	Initials.	Age.	Nationality.	Occupation.	Time of infection.	History of syphilis previous to injections.	Treatment previous to injections.	Duration of disease at time of first injection.
1	Kn.	19	German.	Clerk.	Mch., '85.	Syphilis maligna. Slight erosions; periadenitis, bubo both groins. '85, 23, 4, prodromal pustule of scalp. 15, 5, general maculo-papular syphil. 8, 6, acneform syph. of trunk and arms. 21, 6, periostitis mandibul. after tooth-extract. 20, 7, erythemaform pustular s. of elbows, knee, thigh. 10, 10, ulcers of tonsil and rheumatic pains in shoulder, old ulcers broken again, and new ones increased; no decided improvement to Dec., when new pustules of scalp. '86, Feb. Ulcer of tonsils. April, May. New ulcers of tonsils and deep ulcerations of shoulder, gluteal region, and heel. June. No improvement. '87, May. Papular squamous syphil. trunk and extremities.	Mixed pil. protoj., mixed, 29 inj. hydr. bician. 1 p. c., iod. sod. & biniod.; 5, 1, to 9, 5, 2, fumigations cal., quin., and iron. Iod. sod.	16 m.
2	Kl.	50	German.	Furrier.	?	1882. Gummata of sternum, tibia, infiltration of muscles of thigh. 1881. Sequester of tibia. Since Oct., 1885, diffuse swelling of inner aspect of left thigh, supposed to be due to gummatous periostitis, variously affected by treatment.	Inunctions iod. pot. Inunctions iod. pot.	At least 5 yrs.
3	Mo.	50	Am.	Merch'nt.	Jan., '86.	Roseola, 24 Feb.; psoriasis palmar syph., April; throat affection in May; recurrent palmar squam. syph., 26th June. April, '87. Slight papular squamous eruption on hands.	Pilul. iod. fl.	6 m. 15 m.
4	Co.	38	German.	Merch'nt.	Mch., '85.	April 30, '85. Syphil. maculo-papulosa univers. All through fall and winter until Sept., '86, more or less slight affections of tonsils and lips; squamous affection of fingers and palms recurring obstinately in spite of treatment.	Partly pil. protoiod, partly nat. iod. w. sublimat. or biniod. of merc.	18 m.
5	Do.	32	Ger.-Am.	Up-holst. furniture	May, '86.	July 11, Roseola; Oct. 3, ulcers of throat; papules in face. Feb., '87. Papulo-pustular syph. of neck and upper lip.	Pil. protoiod. and mixed.	5 m. 9 m.
6	Schr.	24	Ger.-Am.	Barber.	July, '86.	Sept., '86. Roseola, throat affection.	Mixed	3 m.
7	Be.	32	German.	Barber.	May, '86.	July, '86. Syph. maculo-papular, very hard and broad papules on back. Nov. 1. Recurrence of papules on back and neck. Jan. 25, '87. Eruption papular-pustule on scalp. April, '87. Recurrence of broad papules on cheek and wrists.	Internal f'm start; 26 inj. bician. mer. to Aug. 24. None.	6 m. 8 m. 11 m.
8	Le.	29	German.	Barber.	Fall, '85.	Infection uncertain, probably at angle of mouth, where characteristic scar; general eruption about Christmas, 1885, which increased in spite of treatment; March to May, '86, in German Hospital. Nov., '87. Papulo-squam. syphil. penis, thighs, and trunk; remnants of former eruption. Feb. 15, '87. Recurrent papulo-squamous syphilide, confined to the right arm and leg.	Intern. treatment; 50 inj. bicianide of mercury in hospital; iod. pot. None.	Abt. 14 m. Abt. 16 m.

TABLE I.

Series of injections.	Number and character of injections.	Duration and dates of series of injections.	IMMEDIATE RESULTS.		Effects on symptoms and course of syphilis.
			Locally.	On general health.	
1	3 cal. aq.	45 days. 18, 6 to 3, 8, '86.	Moderate pain after 1st and 3d inj.; after 2d, hard nodule; abscess opened July 8.	.....	Ulcers healed well, but on appearance of ulcer of posterior wall of fauces, iodide of sod. Oct. 3 all symptoms disappeared; no new symptoms to May 10, '87, patient being under observation on account of gonorrhœa.
2	2 hyd. ox. fl. in aq. 1:30.	14 days. 3 to 17, 5, '87.	Severe pain after 1st inj.; confined to b'd for several d.	.....	Eruption disappeared June 7; no new symptoms for 7 months. Feb., '88, gummatous ulcer of prepuce. April, '88, gummatous ulcer on calf of left leg, not healed to Nov., '88.
1	6 cal. aq. (1½, 2½, 2½) syringe.	106 days. 6, 6, to 10, 10, '86.	.....	Pain considerable after 1st inj., afterward less; felt through the entire system that it had effect.	Swelling softened during treatment by injections; Dec., '86, opened and discharged large quantities of watery fluid; remained open until after evacuation of small piece of bone in Oct., '87; another splinter in April, '88; since healed.
1	4 cal. aq. (2 a ½, 2 a ½.)	28 days. 17, 7, to 5, 8, '86.	Severe pain and swelling after 2d; no abscess; several d. at home.	None.	Symptoms disappeared before 4th inj.; no recurrence to April, '87.
2	4 hyd. ox. fl. aq. (3 a 1:30, 1 a 2:30.)	55 days. 7, 4, to 4, 6, '87.	After 1st and 3d inj., considerable pain for several days.	None.	No symptoms of syphilis as late as Nov., '88; gained 40 pounds.
1	3 cal. aq. (2 a ½, 1 a ½.)	35 days. 25, 9, to 31, 10, '86.	After 1st, swelling; after 3d, hard nodule, with softening; healed without breaking.	None.	Except slight scaling of palm in 1888, no recurrence of symptoms; no treatment afterward but extr. fluid, sarsaparilla, Richter.
1	4 cal. aq. (2 a ½ s., 2 a ½.)	21 days. 3, 10, to 21, 10, '86.	Moderate pain.	None.	No symptoms of syphilis until Feb., '87.
2	3 hy. ox. fl. 1:30 aq.	38 days. 6, 2, to 6, 4, '87.	Little pain.	None.	No symptoms of syphilis since to April, '88.
1	1 cal. aq.	.....	Considerable pain.	.....	Refused further injections; cont. internal treatment.
1	1 cal. aq. ½; 5 hy. ox. fl. 1:30 aq.	44 days. 1, 11, to 12, 12, '86.	Moderate pain after 1st inj.	None.	Except pigmentation, eruption had disappeared.
2	8 hy. ox. fl. 1:30 aq.	56 days. 25, 1, to 22, 3, '87.	Moderate pain.	None.	All symptoms had disappeared.
3	4 cal. a vap. (2 aq. 2 ol. vas-el.)	42 days. 5, 4, to 17, 5, '87.	Pain mod. after 1st inj.; formation of nodule wh. broke on 12th day, giving little inconvenience; less pain from vaseline.	None.	No return of symptoms after all but slight pigmentation had disappeared; during treatment, malaria in 1887; latest news, fall of 1888.
1	½ cal. aq. 4 hy. ox. fl. 1:30 aq.	34 days. 7, 11, to 11, 12, '86.	Small lump after cal.; not prevented from attending to business.	None.	Eruption disappeared after 3d inj.
2	8 hy. ox. fl. 1:30 aq.	65 days. 15, 2, to 21, 4,	No considerable pain.	None.	Only slight pigmentation in popliteal region; no recurrence to March, 1888.

TABLE I—(Continued).

No.	Initials.	Age.	Nationality.	Occupation.	Time of infection.	History of syphilis previous to injections.	Treatment previous to injections.	Duration of disease at time of first injection.
9	Bl.	32	German.	Merchant.	Oct., '86.	Oct., '86. Ulcer near insertion of penis on integument. Dec. 2. Roseola. Feb. 24, '87. Ulcer of tonsil. Mch. 3. Macular syphilide of large, round, and oval spots. Apr. 5. Ulcers of mouth and tonsils. Indur. frenul., obstinate swelling. Dec. 13. Roseola; adenitis.	None. Mixed.	2 m. 5 m.
10	To.	26	Am.	Clerk.	Oct., '86.	Feb. 2, '87. Papulo-squam. syph. of scalp. June 19, '87. Flat papular exanthema on trunk, showing minimal elevations in center; induration of frenul. persistent. Feb. 8, '89. Roseola (large spots) on trunk, in spite of general excellent health.	None. Iod. sod. None (tonic). None.	2 m. 4 m. 8 m. 28 m.
11	Kr.	35	German.	Waiter.	Sept., '86.	July 20, '89. A number of flat squamous papules on thorax. Dec. 27. Syph. papulo-squam. (broad, hard, scaly lesions); ulcer on lip.	Pil. protoiod. 1 w. Had been treated intern. before secondary symptoms.	33 m. 3 m.
12	Di.	30	Ger.-Am.	Ag't.	Sept., '85.	Dec. 19, '85. Roseola; angina; adenitis (swelling existing before infection). March 17, '86. Throat affection. May. Several scaly papules on abdomen. June 21. Annular papular syphilis. Nov. Several scaly papules. Jan., '87. Papular eruption on forehead.	Pil. protoj. to 17, 3, '86, mixed to 3 pills of protoj. and sublimat; 21, 6, to 27, 8, 24 inunctions; Nov., iod. None.	15 m.
13	Noe.	23	Ger.	Clerk.	Nov. 16, '86.	Jan. 16. Roseola; adenitis. April 24. Plaques of tongue; scaly papules on fingers. April, '88. No symptoms present; on account of removal from New York.	None. Pil. protoiod. None.	2 m. 5 m. 15 m.
14	Sohn.	54	Ger.	Sailor.	Fall, '85.	March, '87. Induration in sulc. coron. persistent; angina; tuberculo-pustul. syph. of scalp, thigh, and arm. June 23. Recurrence of eruption on scalp.	Internal treatment mixed. Iod. c. sar.	Ab't 18 m. 21 m.

TABLE I—(Continued).

Series of injections.	Number and character of injections.	Duration and dates of series of injections.	IMMEDIATE RESULTS.		Effects on symptoms and course of syphilis.
			Locally.	On general health.	
1	4, 4 $\frac{1}{2}$ hy. ox. fl. 1:30.	31 days, 4, 12, to 4, 1, '87.	Moderate pain: pain for 2 to 3 days.	None.	Exanthema disappeared after 3d injection.
2	4 hy.ox.fl. 3 a 1:30, 1 a 2:30.	22 days, 11, 4, to 3, 5, '87.	Considerable pain and swelling after 2:30 hy. ox. fl.	None.	Nothing but slight transient erosions of tongue; no regular continued internal treatment; no recurrence to April, '89.
1	7 hy.ox.fl. 1:30.	52 days, 13, 12, '86, to 3, 2, '87.	Pain moderate.	None.	After 3d inj. symptoms greatly reduced; after 6th, nothing left but induration; iod. sod.
2	3 $\frac{1}{2}$ cal. aq.	14 days, 10 to 24, Feb., '87.	Considerable pain and nodule after 1st inj., less after 2d and 3d.	After 3d inj. severe stomatitis (wisdom teeth) & gen'l malaise, anaemia (no kidney or bowel affection).	To April 19th, only remnants of induration; general health improved again.
3	7 hy.ox.fl. 1, 5 ol. vassel.	71 days, 19, 6, to 29, 8, '87.	Very little inconvenience.	None.	Exanthema disappeared Aug. 1; induration greatly reduced; the reduction of the latter continued for month after treatment, and disappeared altogether until summer of 1888; no recurrence of symptoms until Feb. 8, '89.
4	4 cal. ol. oliv.	38 days, 8, 2, to 17, 3, '89.	Hardly any.	After 1st inj. burning feel'g about heart; within 24 hrs. after 3d inj., pain in chest, etc.	Exanthema disappeared after 2 injections. April 21, ulcer on forearm somewhat suspicious; healed kindly under non-specific treatment. 19th May, no symptoms.
5	2 cal. aq.	8 days, 3 to 11, 8, '89.	Hard lump after 1st inj.	None.	Sept. 28, eruption entirely disappeared; no signs of syph.
1	7 hy.ox.fl. 1:30 aq.	48 days, 27, 12, '86, to 14, 2, '87.	Moderate pain; swelling after 2d inj.	None.	Eruption disappeared 28th Feb.; condyl. lat. anus; squam. papul. of penis; ulc. lab. sup. iod. April 14th, slight affection of month; pil. protoiod. May 3d, all symptoms disappeared; left city.
1	6 hy.ox.fl. 1:30 aq.	93 days, 7, 2, to 3, 5, '87.	Pain considerable.	None.	After 5 inj., symptoms disappeared July. Aug., single papules recurring, mixed tr. and pil. protoj. Oct., traumatic periostitis of tibia; iod. Feb. to Oct., '88, recurrent small scaly papules in groups on extremities; Donovan, Oct., '88, specific ulc. of leg; sublimat.; healed in Dec. Feb., '89, papulo-pustular eruption of scalp; iod. sod.; precip. ointm. April, '89, healed.
1	5 hy. ox. fl. 1:30 aq.	42 days, 16, 1, to 27, 2, '87.	Severe pain after two first inj.; very little later.	None.	March 6, adenitis and induration alone remaining; iod. sod. March and April, slight affection of mouth and throat.
2	5 hy. ox. fl. (2 a 2:30 aq. 1 a 1:30, 2 a 1, 5:30).	47 days, 3, 5, to 18, 6, '87.	Second inj., great pain.	None.	All symptoms disappeared. July 28, slight affection of tongue; iod. Sept. 17, scaly spots on fingers and toes; pil. protoiod.; scaling continuing to end of 1887. Jan. to Meh., '88, no treatment.
3	1 cal. aq.	.....	Severe pain, swelling of thigh, hard lump, but no abscess.	General malaise.	May 29, no symptoms of syphilis.
1	5 hy. ox. fl. (3, 1:30, 2:30).	56 days, 23, 3, to 18, 5, '87.	Moderate pain, more severe after 4th inj. of 2:30.	None.	Effect very satisfactory; decoct. sarsaparilla e. iod. sod.
2	1 cal. vas. 10 hy. ox. fl. (3, 4, '87, to 1, 1, '88).	266 days, 23, 6, '87, to 16, 3, '88.	After cal., severe pain and inability to move; little pain after hy. ox.	None.	Eruption sometimes improved, then breaking out again in face since Feb. Iod. sod. From March until Sept., no return. Sept., '88, new eruption on scalp and gummatus infiltration (periostitis of frontal and parietal bone), relieved by iod. sod. March, '89, return of gummatus periostitis; iod.; not cured entirely in July, '89.

TABLE I—(Concluded).

No.	Initials.	Age.	Nationality.	Occupation.	Time of infection.	History of syphilis previous to injections.	Treatment previous to injections.	Duration of disease at time of first injection.
15.	Em.	28	Ger.-Am.	Custom-house	Sept., '84.	Nov., '84. Roseola. March, '85. Papul. syph.; frequently recurring throat and mouth affections, and papulo-squamous eruption June 12, '87. Infiltration of tongue.	Intern. June to July, '85; 21 in. ly, bi-cyan. mixed tr. and iod. 15 inj. bi-cyan.	Ab't 30 m.
16	Schl.	28	German.	Ma-chin-ist.	Apr., '87.	June, '87. Papulo-squam. syphil. 15 to 30 June in German Hospital. Aug. 31, '87. Specific ulc. leg; continued medicine for several months without making his appearance until Dec., '87, then discontinued. Aug. 13, '88. Angina; pustul. ulcer; syphil. of extremities and tragus of ear.	Mixed.	3 m. 16 m.
17	Ke.	25	Ger.-Am.	Mer-ch'nt.	May, '87.	July 26, '87. Papul. syphil. Aug. 29. New eruption, pustular, on scalp; affection of tonsils; while on business trip, severe headache, not affected by specific tr.; cured by rest and iron; recurrent papular erup. (lichenoid). Up to Aug., '88, obstinately recurring papular squam. eruptions on scalp and extremities.	Pil. protoiod.	6 m.
18	Va.	27	German.	Cl'rk.	Oct., '87.	Syphilis maligna; very extended hard induration of prepuce; bubo. Dec. 16. Papul. syph. (small, hard papules) in face and entire body. Jan. 1, '88. Specific ulcer of leg, ulcer of tonsils. March 7. Ulcer on leg opened again; fresh papules on forehead and body. July 5. Ulcer of tonsils. July 11. Ulcer erythem. on thorax, healed July 30. Aug. 9. Ulcerating pustules over eyebrow, forehead, neck, arm, and leg. For prevention of future attacks.	Mixed.	3 m.
19	Ka.	26	German.	Mer-ch'nt.	Nov., '86.	Slight induration about Jan. 16. Typhoid fever in Feb. Erythema. March 9. Roseola; mild angina specif. Oct., '86. Affection of throat. March, '88. Throat. June 9. Papulo-squam. syphil. of scalp and hands. Nov. 20. Papulo-squam. eruption of palms.	Pil. protoiod. 16. 4. to Aug. Mixed pil. Nov., '87, to Meh., '88, mixed.	20 m. 24 m.
20	No.	22	German.	Wine mer-ch'nt.	Oct., '88.	Suffering from hoarseness since child. Nov. 5. Roseola disappearing. None.	Mixed.	2 m. 6 m.
21	Ko.	31	Ger.-Am.	Clerk.	In '83.	Was treated for two years continually; had but very slight eruption and throat trouble. Jan., '89. After protracted rheumatism, pain and swelling of tibia. Feb. 15. Ophthalmoplegia externa completa, vertigo, cephalalgia.	Internal, iod. sod.	Ab't 5 yrs.
22	Br.	30	German.	Mer-ch'nt.	Dec., '88.	March, '89. Papular syphil. (single papules on hip, popliteal region, arms, etc.); excision of induration in Feb.	None.	3 m.
23	Vo.	33	German.	Wait-er.	?	Induration of prepuce, very large, in Feb. (two months after exposure?); painful swelling of inguinal glands. April 12. General papular syphilide.	Iod. pot.	3 m.

TABLE I—(Concluded).

Series of injections.	Number and character of injections.	Duration and dates of series of injections.	IMMEDIATE RESULTS.		Effects on symptoms and course of syphilis.
			Locally.	On general health.	
1	2 hy. ox. fl. 1 : 5 vascl.	43 days, 12, 6, to 25, 7, '87.	Severe pain and swelling after both injections.	None.	No severe symptoms afterward; tongue healed after short treatment of iod. Since fall of 1887 no symptoms of syphilis, except slight excoriation or scaly papules.
1	2 hy. ox. fl. 1, 5:30.	8 days, 30, 6, to 8, 7, '88.	Rather painful.	None.	To complete series of bicyanide; symptoms all disappeared.
2	6 hy. ox. fl. 1 : 30.	54 days, 13, 8, to 6, 10, '88.	Very moderate pain.	None.	Intercurrent headaches, and attacks of fever from malaria, which reduced patient considerably. Oct., '88, iod. until Dec., when all ulcers were healed. No return of symptoms to Apr., '89, but frequent malarial attacks.
1	½ cal. vas.	.....	Swelling and severe pains for 2 weeks.	None.	
2	1 hy. ox. fl. 1 : 30. ½ hy. ox. fl. 1 : 30.	Nov., '89.	Again severe pains in leg for 2 wks.; after 2d inj., 2 d. in bed.	Pain around chest.	Later trial to use injections of bicyan. on back proved the same painfulness and pressure about chest; returned to internal treatment; only slight eruptions to date.
1	5 hy. ox. fl. 1 : 30.	52 days, 1, 1, to 21, 2, '88.	Severe pain after 1st and 3d inj. on left side.	Stomatitis; diarrhoea after 1st inj. (bismuth after following).	Syphilide disappeared; throat not affected; ulcer on posterior wall of fauces; iod. sod., iron.
2	5 hy. ox. fl.	42 days, 7, 3, to 18, 4, '88.	Pain after 1st and 3d inj.	Diarrhoea prevented by op. bism.	April 18, all symptoms had disappeared; general health excellent; extr. sarsap., Richter.
3	10 hy. ox. fl.	95 days, 9, 8, to 12, 11, '88.	Pains in legs, sometimes very severe.	Slight attacks of diarrhoea on 1st day after inj.	June 18, all right; Hot Springs, Va. Took iod. sod. until Jan. 23. Ulcers healed and no new symptoms recurred to date.
4	4 hy. salicyl. ol.	32 days, 1, 4, to 3, 5, '89.	No pain or inconvenience.	No diarrhoea.	
1	5 hy. ox. fl. 1 : 30.	31 days, 9, 6, to 9, 7, '88.	Slight inconvenience.	None.	All symptoms disappeared, and did not return until Nov., '88.
2	4 cal. ol. 1 : 10.	28 days, 20, 11, to 18, 12, '88.	After 1st inj., lung symptoms, pain after 4th.	General weakness and nervousness.	To May, '89, no symptoms; slight papule of hand in June, of doubtful nature.
1	4 hy. ox. fl. 1 : 30.	54 days, 14, 11, '88.	Little pain and inconvenience.	None.	No recurrence of symptoms of syphilis; on business trip during Feb. Meh., infiltration of lung.
2	3 cal. ol. 1 : 10.	7, 1, '89.	No pain.	None.	New cold increases lung trouble; 3, 5, hæmoptal; went to Europe.
1	4 cal. ol.	35 days, 22, 2, to 28, 3, '89.	More inconvenience in moving than pain.	None.	Cont. iod. sod. in large doses. May 10, eyes cured, tibia somewhat tender on pressure; cont. sod.
1	10 hyd. salicyl. ol. 1 : 10.	64 days, 16, 3, to 19, 5, '89.	No pain, little inconvenience.	None.	June, papule of tongue. Sept. 4, several small doubtful papules on back.
1	6 ol. sal. 1 : 10.	38 days, 12, 1, to 20, 5, '89.	Only after 1st inj., severe pain.	None.	July 12, papulo-pustul. syph. on scalp; plaques of lips and mouth; Aug. 12, psoriac palm; pil. protoiod.

(To be continued.)

DERMATITIS HERPETIFORMIS.

A REPORT OF THREE CASES.

By HENRY W. STELWAGON, M. D.,
Philadelphia.

THE disease or condition implied by the name dermatitis herpetiformis is sufficiently uncommon and its nature as yet so obscure as to merit a more or less extended report of each case met with. While I have had opportunity of seeing several cases of this rare disease coming under the observation of Dr. Duhring, in my own practice, in the past ten years, out of a total of about eight thousand skin patients but three cases are recorded. Two of these may be said to represent typically the vesicular variety; the other was of a multiform nature, at one time simulating pemphigus, at another herpes iris, and at another erythema multiforme. It is not my present purpose to enter into a discussion of the nature of the disease, the propriety of the name, or the advisability of grouping together the various cases described under this term. I can not but feel, however, that my distinguished townsman, in presenting and grouping these various conditions, which in the past would have been reported as several diseases, has made a striking advance, an important step toward a more intelligent study and a clearer understanding of these obscure and puzzling cases.

The following notes will, I think, portray the main character and course of the three cases coming under my observation.

CASE I.—William H., aged thirty-two, of English birth and in fair general health, applied for treatment at the Philadelphia Dispensary for Skin Diseases in November, 1883. The eruption for which he sought relief had, according to the statement of the patient, first made its appearance in June, 1881, and consisted of small solid and vesicular elevations, for the most part occurring in groups, and involving the face, neck, trunk, and limbs. Itching had been a troublesome symptom. Considerable arsenic had been taken, and this remedy, he stated, appeared to give him some relief, but the benefit was only temporary. At the time of his application at the Dispensary the following condition was noted: The face, neck, trunk, and upper part of the limbs were the seat of a vesico-papular and a vesicular eruption, the vesicular character being pronounced. Many of the lesions were discrete, elevated a few lines, and varying in size from a pin-head to a large pea; they were irregularly rounded, angular, or elongate. For the most part, however, the eruption appeared in groups of three or more lesions, the skin intervening between the groups remaining apparently normal. Here and there individual lesions, as they dried, showed slight umbilication. Especially on the breast and upper part of the back was the peculiar grouping of the vesicles to be noticed. In places the vesicles had coalesced, resulting in large, flat, irregularly rounded, quadrate, stellate, or puckered-looking blebs. The vesi-

cles and bullæ, although full, were not distended or tense. In some lesions could be seen a slight tendency of the contents toward milkiness, a few becoming sero-purulent. The same characters, but to a less conspicuous degree, obtained with the eruption on the limbs and face. On the latter, and particularly on the ears, the eruption was more scattered, and, although the same disposition to grouping was noticeable, the groups were small and rarely consisted of more than two or three lesions. In the main the individual lesions, as well as the groups, appeared to arise from apparently healthy skin, but not in all; in some they had their origin from a slightly inflamed base or hyperæmic spot, and this hyperæmic base persisted. These latter groups possessed a close resemblance to the groups of zoster. The covering of the vesicles and blebs appeared thin, but exhibited no tendency to spontaneous rupture. Here and there the lesions had been rubbed or scratched, and in addition to such excoriations a few linear scratch-marks could be seen. The burning and itching, the patient stated, were at times almost intolerable. The man claimed to know several days in advance of the approach of an outbreak by a peculiar burning and heated feeling in the skin. In spite of the cutaneous disturbance and its persistence, the general health remained good, although the man was depressed. There was, however, more or less irregularity of the bowels. Suitable local treatment and a prescription containing Fowler's solution and cascara sagrada were ordered. The patient continued this treatment of his own volition for several weeks, with, so he stated, marked relief, and did not reappear at the Dispensary until a relapse took place two months later. At this time the eruption was much more extensive and of a more severe grade than when the patient was first seen, but the same characters were preserved. As he had been constipated for several days past, cascara sagrada, without the arsenic, was again prescribed. He reported a month later, and, with the exception of one or two vesicular groups, the skin was entirely free. Two weeks afterward a dozen or more discrete vesicles and groups could be seen, and so the disease varied for seven or eight months, at the end of which time a fresh and more or less general outbreak occurred. Under the use of a saline laxative and arsenic improvement again set in.

The next note is made in March, 1885, about a year and a half after the case first came under my observation, and it was to the effect that another extensive and severe outbreak had just taken place. The character of the eruption remained the same, likewise the distribution. A tonic saline laxative, along with an antipruritic lotion, was prescribed, and some relief afforded. In June the eruption had again become much worse—sufficiently so as to impel the man to visit the Dispensary. His next visit to the institution was made the following May—eleven months later. He had continued the treatment prescribed at the former visit for several weeks, until the activity of the disease had diminished, the affection afterward remaining comparatively quiescent. A similar mixture, containing a small quantity of arsenic, was prescribed, and seemingly with benefit. Four months later—in September, 1886—he reappeared, and an examination showed another decided relapse. The patient was not seen from this date until the

past month, two years later, coming at this time at my request. He stated that during the two years his skin had been fairly free; at least it had not been sufficiently troublesome to lead him to sacrifice the time necessary to visit the institution. In the past week, however, a fresh general outbreak had made its appearance. In fact, the eruption in extent and severity was at this time about the same as that which presented when he first came under my observation. So far as could be ascertained, no cause for the disease existed. In all it had now lasted, with remissions, a period of eight years, the last five of which the case had been in my charge. The general health was seemingly good throughout, there was no organic disease, and the patient during the whole period of the disease had been engaged uninterruptedly at his occupation. The disease was so variable in its severity that the effect of remedies was necessarily doubtful, but at the same time the impression was formed that the process was more or less influenced either by arsenic or laxatives, more especially the latter.

CASE II.—John B., aged thirty-four, laborer, of Irish birth, was admitted to the Hospital of the University of Pennsylvania, November 1, 1886. His condition when admitted was as follows: His whole integument was closely covered with discrete and confluent blebs, varying in size from that of a large pea to that of a hen's egg, and, as a rule, without areolæ. The lesions for the most part were distended; others were more or less flattened. The eruption was profuse, and spared no portion of the body. The skin between the bullæ was in some places normal in appearance, in other places it was of a pinkish or purplish tinge. The conjunctivæ, as well as the mucous membrane of the mouth, were likewise involved in the process. Symptoms were also present, such as coughing and the occasional spitting of small flakes of membrane, indicating that the laryngeal and tracheal mucous membranes were similarly involved. The eruption exhibited no attempt at symmetrical arrangement. The temperature was above normal, and the pulse accelerated. There were mental depression and profound general weakness. In short, every symptom of a serious pemphigus was present, and at this time, without the previous history, such it was considered. The history of the development of the disease and its further course, however, indicated a severe case of the multiform type of dermatitis herpetiformis. From the patient himself and from the notes sent me by Dr. Trimmer, of White Haven, Pa., who had been previously in charge of the case, the following history was obtained: About the last of July, three to four months before admission to the hospital, he contracted scarlet fever from one of his children. The attack was severe and of the anginose type. Ten days after thorough convalescence had begun, and when desquamation had about ceased, he left the house one evening to join some friends, and drank heavily of beer, which had been his custom before his illness. On the following day it was noticed that he was feverish. At the same time there appeared a band of papules, papulo-vesicles, and vesicles, like a collar, around the neck, a similar band around the ankles extending upward six inches, and a four-inch band around the wrists. The papules rapidly developed into vesicles, and these for the most part became confluent. The pri-

mary vesicles were small. New parts were soon involved, and finally the whole surface shared in the eruption, the lesions being at first similar to those which had appeared on the neck, wrists, and ankles. The eruption now consisted of discrete and confluent vesicles and bullæ, some of the latter being as large as a small hen's egg. This attack lasted nearly four weeks, at the end of which time there was, according to Dr. Trimmer's statements, scarcely a vesicle or bleb to be seen. He was then given a bath. The following evening he had a feeling of intense burning under the skin, followed the next day with a general crop of vesicles and bullæ. These were not quite so large or so distended as the bullæ of the former outbreak. From this time until his admission into the hospital, crop after crop developed, before one had subsided a new outbreak making its appearance. The constitutional symptoms thus far had been a variable elevation of the temperature, an increase in the pulse-rate, irregularity of the bowels, diarrhœa followed by constipation, and a coated tongue.

The course of the disease after admission may be given in the notes made from time to time. It may be here stated that from week to week the urine was examined, but, further than an abundance of urates, nothing abnormal was found. Mild external applications were employed with a view chiefly to relieve the intolerable burning and itching. The blebs were punctured as soon as formed. Arsenious acid was prescribed in one-thirtieth-grain doses, three times daily, and also twelve grains of quinine in divided doses each day, together with plain nutritious diet and some malt extract. The diet was full but unstimulating. On November 6th, five days after admission, the patient was much more comfortable, although new blebs continued to make their appearance both on the surface and on the buccal mucous membrane. The dose of arsenic was increased to one twentieth of a grain. November 9th: New blebs continue to appear on the trunk, and several erythematous spots on the hands. The vesicles and blebs at this time arose from apparently healthy skin; later, as it will be seen, they had for the most part their origin in erythematopapular or papulo-vesicular patches. November 18th: New crop of blebs on the face and trunk, with a tendency to form festoons and circles. A small vesicle on the conjunctiva of the left eye near inner edge of the cornea; the neighboring conjunctival vessels injected. Dose of arsenic increased to one twelfth of a grain. Old lesions rapidly disappearing. December 6th: Two large blebs—one on the foot, the other on the thigh—and an extensive general erythematous and papular eruption, assuming the shapes of rings, segments of circles, and in places forming festoons; in the segments of circles there is a strong disposition to vesiculation. Old eruption almost gone. The palms and soles were painful and tender, and of a light pinkish or purplish hue. A laxative pill at night was ordered. December 20th: Marginal keratitis in the left eye. General skin symptoms much improved, and less disposition to the appearance of new lesions. Four days later the

improvement had been so marked that the patient desired to pass Christmas at home, and at his request he was discharged. At this time, with the exception of a dozen erythematous spots and several small vesicles, the skin was free. The skin of the hands and feet, however, remained tender, and of the same pinkish or purplish tint, resembling the tint of passive congestion. The dose of arsenic had been increased to one eighth of a grain.

On the 2d of the following April the patient was again admitted to the hospital. Since his return home, three months previously, I had heard from him irregularly, and his condition, while upon the whole much improved, was far from satisfactory. The eruption had been to a great degree in abeyance, but from time to time new lesions had made their appearance. The constitutional treatment had been during this time of a general tonic nature. On admission at this date there was more or less general weakness, and the skin was irregularly covered with an erythematopapular eruption, with here and there a few small and large discrete and grouped vesicles and blebs. A feeling of burning was complained of, but itching was at this time slight. One or two ruptured blebs could be seen in the mouth. Arsenic was again administered and in increasing doses. The patient's condition varied from day to day and week to week, a more or less profuse erythematopapular eruption, scattered blebs, and groups of vesicles making their appearance from time to time. The stomach rebelled against the arsenic, the dose of which had been increased to one eighth of a grain three times daily, and it was discontinued. Although apparently robust in appearance, the man was weak and debilitated, and, with a view of toning up, cod-liver oil was, after a few days' intermission, ordered. The middle of May there was another general outbreak, but partaking more of the nature of a well-marked erythema multiforme. The trunk, limbs, and face were covered with erythematous and papular rings and segments. Later, especially upon the segmental lesions, bullæ made their appearance, maintaining in a great measure the segmental shapes. There were also a few scattered, flattened erythematous elevations upon which could be seen irregularly distributed vesico-papules and vesicles, somewhat similar to the patches of herpes zoster. There was considerable itching, although at this date burning was the more prominent subjective symptom. All this time the formation, at irregular intervals, of abortive bullæ on the tongue and buccal mucous membrane continued. The palms and soles, which also showed the different phases of the eruption, remained painful and tender—so much so that standing or walking was almost impossible. The temperature at the beginning of this, as with previous outbreaks, showed an elevation of from one to three degrees; and until the outbreak had well subsided, a tendency to slight elevation, especially in the evening, could be noticed. The urine, so far as pertained to the presence of sugar or albumin, remained normal. There was but little disposi-

tion toward pustule formation, the eruption at this time partaking of the features of erythema multiforme, herpes iris, and pemphigus, more especially the first named. On July 5th twenty to thirty new dime-sized blebs made their appearance, seemingly arising from healthy skin.

As no impression upon the course of the disease had been made with cod-liver oil, it was now discontinued, and phosphorus in small doses administered. The case progressed in the same variable manner, however, the skin never being free, and with, at irregular periods, fresh, more or less general erythematous and erythemato-papular outbreaks. On account of the sensitiveness of the stomach, and for the reason that no positive influence had been exerted, the phosphorus toward August 1st was discontinued, and a general tonic treatment instituted. In the middle of this month the patient was upon the whole better, and, in fact, for the past several weeks the earlier tendency of the disease to take on a serious pemphigoid aspect, as the notes have indicated, had lessened. From this date till September 13, 1887, the disease remained comparatively quiescent, and, at my suggestion, the patient then went to the sea-shore, where he remained until the first week in October. While here he at first improved, but later the disease manifested renewed activity, and the patient, being thoroughly discouraged, and at the suggestion of some of his friends, sought, I have understood, treatment in New York.* In all, the disease had up to this time existed fourteen months, the last eleven of which the patient had been in my charge. While treatment has been incidentally mentioned, it may be stated, as probably already inferred, that it was largely experimental and apparently without result from first to last. The local measures employed were those usually prescribed in acute and subacute eczema.

CASE III.—Susan W., a domestic, aged forty-five, of American birth, tolerably robust and apparently in fair general health, applied at the Skin Dispensary of the Hospital of the University of Pennsylvania, December 14, 1886. On examination, the face, scalp, trunk, and arms were found to be the seat of an irregularly scattered, discrete, and grouped vesicular eruption. The lesions were distinctly vesicular, averaging the size of a small pea, some without areola, others showing a slightly inflammatory base. Many of the vesicles had been scratched, and these points appeared as superficial excoriations. If undisturbed, there seemed very little tendency toward spontaneous rupture; in this respect, and also in the disposition toward umbilication of the older and drying lesions, resembling ordinary herpetic vesicles. The groups were probably more numerous than the discrete lesions, and consisted of from three to six vesicles, seated either upon an inflammatory base or

* I have since learned that this case was subsequently admitted to the Skin and Cancer Hospital, New York, coming under the care of Dr. Fox. At this time the patient was shown before the New York Dermatological Society as a case of chronic erythema multiforme. (See *Journal of Cutaneous and Genito-urinary Diseases*, February, 1888, p. 68.)

upon apparently sound skin. In some of these groups the vesicles had coalesced and given rise to irregularly shaped bullæ. The individual vesicles were peculiar in that they were of a strikingly irregular outline, some angular, some stellate, and, when drying had set in, assuming a puckered appearance. In places could be seen, also, vesico-papules, although these were not numerous. Itching was intense, at times being almost unbearable. The disease, so the patient stated, had made its appearance nine months previously, being somewhat variable in its course. So far as the patient was aware, there had been no predisposing or exciting cause. Her general condition when first seen was fair, but she was nervous and more or less depressed, probably from loss of sleep. A lotion of carbolic acid and an arsenic mixture were prescribed. Fifteen days later the patient was again seen, but the severity of the disease had in no wise abated; some of the old lesions had disappeared, but as many new ones had arisen. On December 21st there had been practically no improvement. The dose of arsenic was increased, and liquor carbonis detergens prescribed for local application. A week later a decided change for the better was noticed, the itching was less violent, and there were fewer new lesions. The case improved up to January 18, 1887, three weeks later, when a fresh general outbreak occurred, much greater in extent than when the patient was first seen.

There were, in addition to the previously described lesions, several blebs, and in places discrete and grouped pustules. The treatment was now changed, but the progress of the disease was in all probability in no way influenced, as the patient failed to return for additional advice, and the case unfortunately escaped further observation. Up to this date the affection had existed eleven months, the last seven weeks of which the patient had been under my care.

In briefly recapitulating, it will be seen that these three examples of dermatitis herpetiformis had much in common. They were all characterized by a remarkable chronicity as well as rebelliousness to treatment. Moreover, the variable nature of the eruption, its herpetic character, the intense pruritus, and the absence of a tendency to atrophy, ulceration, or scarring were striking features. Further, it will be noticed that there was, excepting possibly in the second case, no apparent antecedent or existing cause for the disease, the patients otherwise enjoying tolerably good health. In short, in their character and course and general symptoms these cases were essentially similar to the cases reported by Duhring and others.

Treatment of Gonorrhœa in the Female.—The following formula is given in the *Journal de médecine de Paris*, Dec. 1, 1889:

R. Creoline.....	2·0;
Ext. hydrastis can.....	10·0;
Aque.....	200·0.

M. S.: A dessertspoonful should be added to one pint of water and used for an injection.

ICHTHYOSIS LINEARIS NEUROPATHICA.

By FREDERICK PETERSON, M. D.

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AT a meeting of the Christiania Medical Society, April 24, 1889, Dr. August Koren read a paper with the above title, which is published in the *Norsk Magazin for Lægevidenskaben* of September, 1889. He said ichthyosis, as is well known, is, as a rule, a diffuse disease, generally spreading from the extensor side of the extremities over the whole body, with the exception of the face, scalp, flexor surfaces of joints, palmar and plantar areas, and the genitalia, beginning usually in the first or second year of life and reaching its height about the age of puberty, when, in spite of all treatment, it remains stationary, except that toward the close of summer the skin may often become more soft and moist for a time, soon returning, however, to its previous condition. The disorder does not affect the general health of the patient. The forms described as *serpentina*, *cornea*, and *hystrix* are merely the various developmental stages of the disease. General diffuse ichthyosis is never, according to the authors, congenital, but appears at the earliest in the second month of life. But, in his own experience in the skin department of the Rigshospital, he had seen a case of normally developed *ichthyosis serpentina* that was congenital, and a similar case had also previously been under treatment at the same hospital.

Furthermore, contrary to the statements in books on cutaneous diseases, he had observed the disease to extend also to the face, hairy scalp, plantar and palmar and flexor-joint surfaces. In one case it caused ectropion in both eyes. Dr. Bidenkap, who had seen so many cases in Norway, believed that it spread to the face and head in the plurality of cases in that country. *Ichthyosis congenita* is a very infrequent disease, developing during intra-uterine life, and the child is, as a rule, still-born, or dies shortly after birth.

Besides this diffuse form, there are rare cases of partial local ichthyosis, such as *ichthyosis palmaris* and *plantaris*, differing singularly from the former, which rather avoids these particular surfaces. There are other local varieties, which, when highly developed like *ichthyosis cornea* or *hystrix*, have no small resemblance to *naevi materni*, because of their papillomatous and brownish appearance. But the horny character will often serve to distinguish ichthyosis from these.

An observation of Dr. R. Hilbert (*Virchow's Archiv*, vol. xcix, page 569) in a twenty-four-year-old girl in Bremerhaven is of interest here. There was hypertrichosis of the whole left arm, with a small *ichthyosis serpentina* in the scapular region about an inch in diameter. (Her mother had seen an ape during pregnancy.)

Dr. Koren presented drawings of a noteworthy case of his own (see figure). It is an *ichthyosis cornea* developed in the form of brownish papillomatous stripes with normal skin lying between them. The stripes follow the median, ulnar, and radial nerves of the right arm. Along the median nerve the disease reaches only to the wrist joint, but along the radial it follows out over the hand to the first joints of the thumb and index finger on the dorsal surfaces, while it follows the ulnar on the volar surface to the tip of the little finger. There is, furthermore, a moderate development of the skin affection on the tips of the other four fingers. The disorder was accidentally discovered in a boy nine months old, to whom the author had been called because of an eclamptic seizure. He is the youngest of seven children, one of whom had died three days after birth.



The five other children are living, and all delicate, anæmic, with pale skin and a tendency to catarrhs. The father suffers constantly from rheumatism, and has a mitral defect as the result of several severe attacks. The mother is chlorotic from cancer. There is no trace of heredity to be found in the family. The mother says the child was born with these stripes, that they were more marked during the first few days subsequent to its birth, and believes the improvement in the affection to be due to daily baths.

The case impressed the author, as soon as he saw it, as one of naevus, but, as naevi undergo no change or improvement such as had taken place in this disease, he was led to think of ichthyosis; and closer observation

of the strongly developed epidermal layer, which felt like a grater on stroking it with the hand, assured him of the correctness of his diagnosis. At the same time there was a remarkable resemblance to a rare form of *nævus*, which, because of its asymmetrical appearance upon one side of the body, has been termed by von Bärensprung *nævus unius lateris*, and because of its following branches of nerves has been called by Gerhardt *papilloma neuropathicum*, but is more familiar under the name now in general use given by Simon, *nævus nervosus*. Such *nævi* are uncommon, but an ichthyosis developing so exquisitely along nerve branches, as in this case, is still more rare. Less extensive eruptions of this nature are possibly not so infrequent.

These forms of ichthyosis and *nævus* are so similar in pathologico-anatomical respects that it is not to be wondered at that there are transitional forms which might be considered either the one or the other, according to one's taste. Thus Neumann, in his atlas, places among the *nævi* a case which certainly should, according to the drawings, be rather included under ichthyosis.

There is, moreover, a third cutaneous affection which ought to be mentioned here, for the reason that it may at times make the diagnosis still more uncertain and doubtful, and that is *verruca*. *Verruæ* may at times take an unusual course, following nerve trunks in linear stripes, so that there may be difficulty in differentiating *neri nervosi* from *neri verrucosi*. But the excessive development of the epidermal layer, and the fact that there is diminution in intensity of the disease, will almost always serve to distinguish neuropathic ichthyosis. In the case described by Dr. Koren the drawings were made some ten months ago, and considerable improvement has taken place, many of the plaques having disappeared. *Nævi*, on the other hand, never show such changes, but grow with the growth of the patient's body.

It has been stated that the linear form of ichthyosis, like the *nævus unius lateris*, develops asymmetrically—*i. e.*, only on one side of the body. But there is a bilateral example to be found in literature. Dr. Thieberge (*Annales de dermatologie et syphiligraphie*, 1887, page 138) cites an observation of Dr. Butruille: A six-year-old child presented the linear stripes of an *ichthyosis cornea* upon the backs of both thighs, following the sciatic nerves on the right side to the middle of the leg along the internal popliteal nerve, on the left some distance down the anterior tibiae. There was also a stripe six centimetres long on one of the median nerves. As in Dr. Koren's case, there was neither pain nor other disturbance of sensibility.

As regards the causes of *ichthyosis diffusa*, they are still obscure. Leclair, in his *Recherches cliniques et anatomo-pathologiques sur les affections cutanées d'origine nerveuse*, 1882, has found in this disease pathological changes in the cutaneous nerves. The condition in one case was that of

an atrophic degenerative neuritis. Leloir has found ichthyosis to follow various nervous affections, such as severe cases of sciatica, paraplegias, grave hysterical paralyses, Pott's disease, and lead intoxication.

Schwimmer, in his work on *Die neuropathischen Dermatosen*, 1883, pages 199 *et seq.*, records numerous observations of various authors upon changes in the epidermis subsequent to neural lesions.

The influence of the nerves in diffuse ichthyosis is mentioned in a number of older works on cutaneous diseases. Hebra presents drawings of a striking case of this kind (see Hebra-Kaposi, Virchow's *Handbuch der speciellen Pathologie und Therapie*, 1876, vol. ii, page 41), and says that *ichthyosis cornea* and *hystrix diffusa* appear sometimes in the form of irregular stripes along the skin, following, as a rule, the peripheral spinal nerves. And Kaposi, in his *Pathologie und Therapie der Hautkrankheiten*, 1880, page 517, speaks in a similar manner of *ichthyosis hystrix*.

But whatever may be the underlying cause of the diffuse variety of the affection, there can be no doubt that the local linear forms are in reality due to a trophoneurosis. Lesser, in his *Lehrbuch der Haut- und Geschlechtskrankheiten*, 1885, pages 183 *et seq.*, also speaks of a trophoneurosis as the probable aetiological factor in the production of certain forms of ichthyosis.

Duguet describes a striking case of *ichthyosis serpentina*, unilateral, following, analogously to herpes zoster, an intercostal nerve.

For the trophoneurotic forms of ichthyosis, which have as yet received no name, Dr. Koren suggests the following designations: for the round, circumscribed variety, *ichthyosis circumscripta neuropathica*, and for that distinguished by linear stripes, *ichthyosis linearis neuropathica*.

In a further examination of cutaneous literature I find nothing exactly like Dr. Koren's case, although there are references to neuropathic nævi and excrescences. Thus Thomson, in his *Atlas of Declinations of Cutaneous Eruptions*, London, 1829, describes a case of *navus spilus* following the *nervus mentalis* along the under lip, and another case in which a similar growth followed the inner surface of the right arm along the ulnar nerve from the shoulder to the inner parts of the ring and little fingers.

There is nothing in the atlases and works of Alibert, Cazenave, or Robert Willis bearing upon the subject.

Sir Erasmus Wilson describes neurotic excoriations in his *Lectures on Dermatology*, 1875.

C. Gerhardt (*Jahrb. für Kinderheilk.*, 3. Heft, 1871) mentions a case of neuropathic papilloma.

Lewin (*Deutsche Zeits. für prak. Med.*, 1877, No. 2) regards *navus* as a trophic nervous disease.

Campana (*Giorn. it. delle mal. ven. et della pelle*, 1876) observed eleven cases of *navus* following nerves, such as the first, second, and third

branches of the trigeminus, the cutaneous branches of the third and fourth cervical, the intercostal nerves, the posterior branches of a spinal nerve (double), a lumbar nerve, the crural nerve, and a cutaneous branch of the plexus sacro-ischiadicus (bilateral).

It is probable that such a case as Dr. Koren's, if presented to the New York Dermatological Society, would be considered a neuropathic papilloma.

Dr. Prince A. Morrow tells me that a few cases having many points of similarity with this have been exhibited before the society, and that descriptions of them may be found in some of the back numbers of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES. I find little or no reference to disorders of this character in our later English works on skin diseases, almost the only one occurring in Jamieson's Diseases of the Skin (Pentland Medical Series, Edinburgh, 1888, page 379), where the author describes a case under the name of papilloma neuroticum as "a peculiar disease allied to warts." Further observation and study will be necessary before it can be determined whether Dr. Koren has really added a new form of ichthyosis to those already known, or has merely described a case of papilloma neuropathicum presenting some unusual features.

TWO CASES OF ECZEMA MERCURIALE FROM THE APPLICATION OF SCOTT'S DRESSING.

By FRANCIS J. SHEPHERD, M. D.

IT has long been known that the local application or internal ingestion of the different preparations of mercury is apt to cause eruptions on the skin. Since the introduction into surgery of sublimate dressings, erythematous and eczematous eruptions from this cause have not been uncommon. The old "blue ointment" has frequently caused well-marked eczema, not only at the place of application, but on other parts of the body. Hebra* has described eczema mercuriale as an affection "beginning in the shape of red papules, of vesicles, or of small pustules, which usually multiply to a large extent and close to one another." He denied that the internal administration of mercury ever caused an eruption on the skin. On the other hand, a number of good observers have placed on record undoubted cases of skin eruptions following the internal administration of calomel, iodide of mercury, and other preparations of this drug.

Application of preparations of mercury to the skin may cause severe irritation in some cases, especially if long continued, and the most common

* Vol. ii, N. S. S. Ed., p. 128, Diseases of the Skin.

form of eruption is eczematous or erythematous. For years it has been my custom to treat cases of subacute and chronic synovitis by the application of Scott's dressing (mist. ammoniaci c. hydrarg.) spread on sheep-skin, and until last winter I never saw any untoward results from its use, either in my own hands or those of my colleagues. However, during the past year I have met with two well-marked cases of general mercurial eczema caused by the application of this dressing to the knee joint. Both cases occurred in young men.

CASE I.—H. B., aged thirty-three, a strong, athletic young man, was treated by me in March, 1885, for idiopathic subacute synovitis of the left knee joint, marked by considerable effusion. Scott's dressing, spread on sheep-skin, was applied, in strips an inch wide, from several inches below the knee to several inches above. The dressing was allowed to remain on for some three weeks, and when removed the effusion had disappeared and the knee joint had resumed its normal appearance. The patient remained perfectly well until December, 1888, when he again consulted me for an exactly similar condition of the knee joint. Scott's dressing was again applied in the same way, but over skin which had lately been blistered. The patient felt immediate relief, and was able to attend to his business as usual. At the end of a week he came to me complaining of great heat and itchiness about the knee. On examining him, I found that, above the dressing on the thigh, the skin was inflamed, infiltrated, and somewhat brawny, looking like, indeed, a commencing cellulocutaneous erysipelas. He also complained of tingling, heat, and itchiness of the tips of both ears. He was sent home and the dressing removed; the skin about the joint was hot, red, raw, and weeping, having the appearance of an eczema rubrum. Next day his face was red, hot, itchy, and swollen; eyelids puffy and cedematous, and in a few hours the surface was covered with closely-set vesicles. The ears were much swollen and covered with papules. The eruption spread down the right side of the neck as far as the clavicle. The eczema about the knee extended as far as the groin, where it ceased. It was distinctly vesicular. At the end of a week the vesicles began to dry, and in ten days the affected parts began to desquamate. In two weeks the patient was perfectly well, and the knee joint had again become normal in size.

CASE II.—F. E., aged twenty-eight, in March, 1889, had received a severe injury to the left knee joint, which resulted in an acute synovitis. This was treated by rest and cold applications, and the acute inflammatory condition soon subsided. After a couple of weeks, some effusion into the joint still remaining and the patient being anxious to get back to business, I decided to apply Scott's dressing to the knee and allow him to go about. The dressing remained on for three weeks, and at the end of that time was removed, as the knee appeared quite well and caused him no pain. The skin which had been covered by the plaster was the seat of a well-marked eczematous rash. Lead lotion was ordered to be applied. Three days after the removal of the Scott's dressing the patient complained of a smarting and swelling of his eyelids, and slight redness, heat, and swelling of both cheeks. In two days more the whole of his face was very red, greatly swollen, and both eyes were

closed. There were as yet no vesicles. The rash soon spread to the ears, then covered the whole neck, and rapidly became vesicular. The affected knee was also much inflamed and covered with minute pustules; on the leg, genitals, wrists, and forearm was a well-marked papular eczema, which soon became vesicular and wept freely. Soon the genitals became most acutely inflamed, swollen, and very itchy, resembling somewhat the eruption caused by rhus-poisoning. At the end of a week the eruption on the face subsided, and in ten days desquamation took place, the epidermis coming away in large flakes. The rash on the genitals and leg persisted for some time, and did not disappear for six weeks.

In the first case a prolonged application of the plaster produced no untoward effect during the first attack of synovitis, and the reason for a much shorter application of the plaster causing severe eruption during the second attack was, no doubt, the previous blistering. The skin was rendered more liable to irritation, and perhaps absorbed the mercury more rapidly.

In Case II the patient attributed the spread of the eruption to having scratched the knee, and then unconsciously conveying the infection to the face and genitals by his hands. This is a possible explanation of the eruption not being general, but being limited to certain parts easily reached with the hands.

Since writing the above I have heard of the occurrence of a similar eruption following the application of Scott's dressing in the practice of a colleague. The case was almost exactly similar to the ones above related.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

193D REGULAR MEETING *Continued.*

Influence of the Hot Springs in Arkansas on Syphilis.—DR. E. L. KEYES read a paper on the subject. From personal observations which he had made at the Springs, as well as from the effects which he had seen produced on patients sent there by himself, he was convinced that the waters possessed a decided influence in the cure of syphilis. His observations showed that the physicians who did well at the Springs used most unsparingly mercury by inunction and iodide of potassium internally in enormous doses. And this was exactly wherein the value of the Springs seemed to lie. Here called numerous cases of late syphilis, among them patients with serious involvement of the central nervous system, who were enabled, by means of the hot baths and the internal use of the water, to bear the iodides in greatly increased quantities, thus bringing about a cure in even desperate cases. It is the broken-down cachectic patients whose stomachs refuse to tolerate a sufficiently

high degree of specific medication at home who should be sent to the Hot Springs, for there three or four times the quantity of the iodides can be given without upsetting the stomach, and increased quantities of mercury by inunction without producing salivation. He had verified these statements over and over again, and would recommend all patients to go to the Hot Springs at any sacrifice of time, money, or comfort who were suffering from serious involvement of the brain or spinal cord, and who could not at home be made to tolerate sufficiently high doses of the specific remedies to control the disease. For ordinary cases of syphilis, on the other hand, he did not recommend the Springs, as they could not shorten the duration of the disease, prevent relapses, or cure it in any sense. He did not think there was any value in suppressing the early symptoms of the disease by heroic medication as employed there, as it made the patient less willing to take prolonged treatment at home, which he considered gave the patient the best chance of future immunity from the disease.

DR. J. A. FORDYCE (by invitation) gave the results of his personal experience at the Hot Springs as follows: My experience in the Hot Springs covers a period of three years, during the greater part of which time I had the opportunity of observing from ten to thirty patients daily—one half of whom were probably affected with syphilis. As the majority of these patients used both the hot baths and some form of mercurial treatment, it is difficult to estimate the relative value of each. Occasionally, however, I would see a patient who, either through excess of faith in the hot water or from fear of mercury, would bathe in and drink of the water, without other treatment, for a period of several weeks or months. I have observed such patients both before and after a prolonged use of the baths, but in none of them have I been able to detect any change in the disease which could be attributed to the water. As soon, however, as a mercurial treatment was commenced, improvement would begin and continue.

Many patients come to the Springs after a prolonged mercurial course at home, laboring under the impression that their system is full of mercury, and hoping by the use of the hot water to "boil it out." Patients of this class have developed ptyalism after a number of baths, thus supporting the common opinion that the waters have an influence in eliminating the drug. This effect is probably due to the increased capillary circulation, favoring tissue change and greater activity in the elimination of matter foreign to the tissues. Individuals who come from a malarious district, though having suffered no acute outbreak for years, often, after bathing for one or two weeks, develop some form of malarial fever; gouty subjects, too, after hot baths frequently have an acute outbreak of their trouble. These phenomena are well known to the bath physicians as every-day occurrences. It is observed, also, that new growths, especially those of a malignant character, take on increased activity of development after the use of the hot baths, so that it is a matter of common report at the Springs that persons affected with cancer should not use the hot water.

It would be quite rational to suppose that the increased tissue change which hot baths are known to produce could be utilized to advantage in combating a new growth of such unstable character as the neoplasms of syphilis,

and, in fact, the late stages of the disease seem to be especially benefited by the use of the baths in connection with specific remedies. How much of the cure depends upon the increased power of digestion and assimilation caused by the change of air, scene, and diet, and how much on the baths, is difficult to say. I have seen, however, patients in a profound state of cachexia from old syphilis improve rapidly at the Springs—patients who had been in charge of competent physicians at home, and who had taken mercury and iodide of potassium to the limit of tolerance. I recall now an intelligent man who came to the Springs suffering with syphilitic dactylitis of the fingers, in an extreme state of emaciation and anemia. After a residence there of a few weeks he gained about forty pounds in weight, and returned home in a state of apparent perfect health. He makes periodical visits to the Springs, more as a prophylactic means than as a necessity. Such patients, with diminished powers of assimilation, are often unable to react to the use of remedies at home, or their digestive organs may refuse to retain the drugs; the psychical effects of a change of air and scene, the internal use of the hot water containing carbonic-acid gas, and the stimulating effects of the baths properly used, often seem to start the patient on the way to recovery.

Whatever theoretical considerations may be brought forward, experience shows that many cases of late syphilis are more quickly cured at the Springs than at home. I have never, on the other hand, been able to convince myself that the early stages of the disease were more rapidly cured there than under the inunction method at home. Still, as many patients are unable to carry out this method of treatment, or are under the care of physicians who do not appreciate its importance in producing rapid relief, or understand its technique, the comparison which the patients make between the relief obtained at home and at the Hot Springs results in favor of the latter, and to the Springs is given the credit which should belong to the method of employing the drug.

The liberal use of the hot water internally and in bathing undoubtedly increases the activity of the organs of excretion, possibly enabling the patient to tolerate the drugs in larger quantities. Ptyalism and irritability of the gastro-intestinal canal, however, frequently occur, necessitating a cessation of all medication.

I recall now two cases of death from the use of large and long-continued doses of the iodides—one from gastro-intestinal inflammation, the other from heart failure. It is not claimed by the bath physicians that relapses are prevented by a course of mercurial inunctions; on the contrary, the patients are told to continue the use of mercury on returning home, and when practicable to return again in a year or two. Many patients anticipate such relapses by annual or periodical visits.

The beneficial effects of the hot baths are probably as much overrated by the bath physicians as they are often underestimated by the physician away, self-interest in both cases modifying the advice given.

In the discussion, DR. PIFFARD said that he had never visited at the Hot Springs, but he could say that some of his patients improved by a course of treatment at the Springs, but more of them had not.

DR. MORROW said that a large number of patients who had been treated at

the Hot Springs for syphilis had come under his observation, but that he had not been impressed either with the brilliancy or permanency of the results. Quite a number had developed new and severe accidents within a short time after having been subjected to the regulation "cure," consisting of a full course of baths, mercurial inunctions, and iodide of potassium. He quite agreed with Dr. Keyes that, in ordinary cases, this treatment possessed no advantages whatever over the treatment pursued elsewhere, but he could not agree with him that it was the treatment *par excellence* for obstinate and inveterate cases. He believed that equally good results might be obtained in this class of cases by the judicious employment of tonic and hygienic measures and a vigorous specific treatment at home.

Few even of the resident physicians of the Hot Springs claimed that the waters exerted anything in the way of a modifying or specific action upon the lesions of syphilis; their chief reliance was upon mercury and iodide of potassium; and the distinctive peculiarity of their treatment consisted in the activity and energy of mercurialization and iodization. The practice was to crowd the system with these drugs and then endeavor by hot baths and drinks to float them out through the skin and kidneys. Now, it was a question whether the rapid passage of this metallic current through the system was in any sense beneficial. The claim was made that the use of the waters induced a tolerance for these enormous doses, but certainly, in many cases, pyralism and other severe toxic effects were produced.

He looked upon this heroic medication as opposed to the principles of scientific and rational treatment. If there was any peculiarity which distinguished the modern treatment of syphilis from the old methods, now universally condemned, it was the avoidance of large and toxic doses. While toxic doses might cause a speedier suppression of the manifestations, the ultimate effects were positively pernicious to the patient. The attempt to expel the syphilitic virus by therapeutic violence should be regarded as a step backward—a return to the practice of our forefathers.

The good results of the Hot Springs treatment he regarded as chiefly due to the change of air and scene, the freedom from business cares, and the fact that the patient made it his business to pursue a methodic treatment. All these conditions exerted a favorable influence and energized the process of cure.

DR. BRONSON thought that great care should be exercised by physicians in recommending a cure for syphilis, with regard to which there was still so much doubt. The treatment at the Hot Springs was extremely rigorous, and was capable, in many cases, of doing more harm than good. Patients with syphilis were very apt to get the idea that the only sure cure for their disease was at these Springs, and were induced to return year after year. If all physicians were as conservative in defining the limitations of the virtues of the Springs as was the reader of the paper, perhaps no harm would be done.

DR. BULKLEY said that he, personally, had never been obliged to send any of his many syphilitic patients to the Hot Springs. Many of his cases had been very bad ones, with syphilitic affection of the nervous system, dementia, etc., but in his experience they had yielded just as well to proper treatment in New York as at the Springs, and that the use of hot water here was just as

beneficial as it was there. He considered either mercury or iodide of potassium in very large doses bad treatment, but preferred the mixed treatment in small doses in all the stages of syphilis, and it acted better than large doses of the iodides. He seldom gave the iodide alone. Patients might get rid of all lesions at the Hot Springs within six weeks, but they could get along just as well at home.

DR. ALLEN had seen a few cases that had been treated at the Hot Springs, but he had failed to note any specially good results.

DR. TAYLOR said that he had been greatly interested in the paper just read before the society. The subject had occupied his mind for many years. He considered the condition of the water at the Hot Springs not peculiar, or in itself curative, but the change of air and scene, and the relaxation from all business cares, were important factors in the cure of patients who go to the Hot Springs for treatment. Warm salt baths at the sea-shore were just as beneficial to syphilitic patients as the hot baths at the Springs. Early stages of syphilis were not well handled at the Springs. Many of the patients were given mercury with opium, which was very bad treatment. It locked up the secretions, and they did badly afterward, being especially apt to suffer from tubercular ulcerations. Many of the patients who went to the Springs expected a magic cure, so that after all the lesions disappeared they stopped all treatment until some serious trouble resulted. He had occasionally sent patients to the Hot Springs to keep them away from bad influences at home, or when they would not obey instructions. If doctors took better care of their patients they would seldom get in such a bad state that it would be necessary to send them to the Hot Springs. He would like to say, however, in conclusion, that there were some very good physicians at the Springs.

DR. LEWIS, after considerable experience with patients who had been treated at the Springs, was satisfied that the waters possessed no specific remedial value. He often advised patients to seek the benefits of absolute rest and favorable hygienic surroundings to be found there, but cures were not effected by the treatment, and the usual remedies must be continued after their return.

DR. PIFFARD wished to protest against the use of iodide of potassium in early syphilis. It did no good, hastened the development of the ulcers, prolonged the time of treatment, and lessened its therapeutical action should it be required later in the disease. The iodides were not curative in syphilis, and did not check the progress of the disease, but simply relieved some of the manifestations.

DR. KEYES, in conclusion, said he was gratified by the different views expressed. He considered that the chief virtue in the Hot Springs was that they helped patients to assimilate a greater amount of drugs than they could elsewhere. It was not usually necessary in syphilis to give large doses of the iodides, but when it was, send your patients to the Springs. Change of air and scene were all very well, but the principal good lay in the rapid and easy assimilation of the necessary drugs. In one of his cases moderate doses of iodide of potassium produced purpura; on being sent away, sufficient doses could be tolerated to control the symptoms, but the same doses, when the patient returned to New York again, brought on purpura and upset the stomach; a return to the country became necessary, and the patient returned cured.

Very large doses of the iodides should be given in some cases, as in pure gum-mata, and given then without mercury. You could not place any limit on the amount to be taken, but the dose should be increased until the symptoms were controlled, even if twelve hundred grains were given a day. He had seen a case of ulcerating syphilide of the penis which had been treated by others in various ways, and, as it did not yield to ordinary doses of iodide of potassium, the diagnosis of cancer was made, and amputation proposed. By getting the patient's stomach in good condition with a rice-and-milk diet, and with the use of bismuth and paregoric, the iodide was increased in drop doses until large quantities could be assimilated, and the man was cured. By taking good care of the stomach, you might be able to give large doses of the iodides here in New York, but if they were not assimilated you had better send your cases to the Hot Springs. There was no use of sending patients to the Springs if the destructive process had produced permanent organic changes of a cicatricial sort. The early treatment of syphilis at the Hot Springs was overdone. The mixed treatment was given from the beginning, which quickly controlled the evidences of the disease, without curing them. If the iodide of potassium was given early, it not only did no real good, so far as the malady was concerned, but might actually require very much larger doses later in the disease than would have been necessary if none had been given early.

194TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

A Case of Addison's Disease.—DR. FOX presented a case of this affection in a girl twenty-one years of age. The disease first made its appearance three years ago, the pigmentation beginning on the face and then about the neck in patches. The patient has lived in a malarial district and has been subject for years to malarial attacks. Since the beginning of the attack the patient's general health has been impaired.

She has suffered greatly from nausea, and complains of a constant pain confined to the epigastric region. Although there has not been much loss of flesh, the patient is somewhat anæmic and is extremely nervous, complaining of numbness of the extremities. The pigmentation is now pretty general over the body, but deeper about the waist and in the flexures of the joints. A number of minute white spots have appeared over the abdomen.

DR. PIFFARD considered the case one of Addison's disease. Although the aetiology of the disease was very obscure, he thought the disease in this case might be due to malarial poisoning. When pigmentation is due to Addison's disease there is always pain or tenderness over the solar plexus, and this symptom is present in this case. There also seems to be some pain on pressure over the suprarenal capsules. The liver also seems enlarged. He believed the disease usually began in the solar plexus and afterward attacked the suprarenal capsules.

DR. KLOTZ believed that malaria might be a cause of Addison's disease, as he had seen a female of about the same age as the patient presented by Dr. Fox suffering from the disease as the result of malarial poisoning.

DR. BRONSON doubted the diagnosis of Addison's disease, as it was his impression that the disease was associated with greater systemic disturbance and impaired nutrition than seemed to be present in this case. He believed the disease should be classed among such blood diseases as leukæmia, where there was a profound anæmia and malnutrition. In the present case the general disturbance of the health was not greater than might result from dyspepsia.

DR. SHERWELL said that he did not consider the case one of Addison's disease, but a simple chloasma. He had seen cases of malaria leading to Addison's disease which were associated with symptoms of pernicious anæmia. The patient's apparent health was against the more serious diagnosis. The pigmentation seemed to him to be too superficial for that of Addison's disease, which he believed was a staining of the deeper layers of the skin, especially the corium. He would consider the case, therefore, one of chloasma, due, perhaps, to some uterine disease.

DR. ALLEN agreed with Dr. Fox in his diagnosis of Addison's disease.

DR. LEWIS had seen a few cases of this disease, but the pigmentation had always occurred in patches and with more sharply defined borders—not the diffuse pigmentation seen in this case.

DR. FOX concluded by saying that Addison's disease was not a sharply defined disease, but one characterized by a pigmentation of the skin with functional disturbances of the respiratory and digestive organs, the patients gradually getting worse and worse and finally dying. Of course, the pigmentation of the skin might be due to many different causes, as arsenic, malaria, etc., but in this case the nausea, shortness of breath, and general nervous condition would make Addison's disease probable.

Epithelioma of the Cheek.—DR. LEWIS presented a case of epithelioma of the cheek, with the following history: Mathilda Campbell, sixty-four years of age. For the last twelve or fifteen years she has had what she supposed was a "wart" on the left cheek, close to the left ala of the nose. Two years ago this was removed by caustics, but it reappeared in about a year afterward, and has steadily grown since. At present she has (November 3, 1889) on the left cheek near the ala of the nose a warty mass about the size of a nickel. The growth is elevated; surface irregular; edges hard and resistant, with numerous semi-translucent nodules; base extremely hard and sharply limited; no glandular involvement.

Nov. 30, 1889. Removed horny covering with liq. potassæ, and applied Bougard's paste.

Dec. 4th. Considerable inflammatory action and œdema of tissues about growth. The latter is now represented by a dry, yellowish-white, firm, cheesy mass, the line of demarkation between it and the healthy tissue being absolutely perfect. The paste remained on growth for thirty hours; then poultices were applied more or less faithfully till December 7th, when slough came away, leaving a healthy granulating surface behind it.

Dec. 11th. Healing going on rapidly. Has not returned since.

DR. FOX thought the result of treatment was a very good one, but he would prefer scraping the epithelioma and applying thirty-three-per-cent. pyrogallie acid to the surface. After the slough separated he would apply

mercurial plaster. In cases operated upon in this way there was less pain and but little danger of the return of the disease. You are never sure of getting away all the diseased tissues when cutting alone is employed.

DR. BRONSON was much pleased with the result following Hebra's method of treating epithelioma with nitrate of silver. There was always great advantage of having your cauterizing agent directly under control, which you did not have when pastes were applied. This treatment in some cases should be preceded by curetting the surface of the epithelioma. He thought that pastes had rather a selective action on diseased tissue than an affinity for them.

DR. SHERWELL treated most of his cases of epithelioma by first outlining the disease by running a knife around its edge at a sufficient distance, then curetting thoroughly and applying acid nitrate of mercury, which seemed to destroy all diseased tissue by its decomposition. Moles could be treated in the same manner. He referred to a paper read by him on this subject at the American Dermatological Association in 1887.

DR. ALLEN said that, as a general rule, he did not like to treat epithelioma with pastes. He preferred curetting or cutting out the disease and cauterizing with the Paquelin. In a case recently so treated, an excellent cicatrix was obtained by applying oxy-iodide of bismuth.

DR. LEWIS concluded by saying that he had presented this case as an illustration of the effects of a new caustic appliance which he had been using quite frequently since his attention was first directed to it by Mr. Jessett, of the London Cancer Hospital, last year. Several patients were in the hospital at that time under this treatment, notably one with an extensive epithelioma of the vulva which it would have been unsafe to treat by Marsden's paste or any of the caustic preparations with which he was familiar. The paste would destroy diseased tissue before it would attack the normal. In the present case the paste was kept on about thirty hours, and, although painful, it was not exceedingly so.

The formula for the paste, as published in a large volume entitled *Études sur le cancer*, by Dr. Bougard, of Brussels, in 1882, is as follows:

- | | |
|---|--------------------|
| 1. Wheat flour..... | 60 grammes; |
| 2. Starch..... | 60 “ |
| 3. Arsenic..... | 1 gramme; |
| 4. Cinnabar..... | 5 grammes; |
| 5. Sal ammoniac..... | 5 “ |
| 6. Corrosive sublimate..... | 0.50 centigrammes; |
| 7. Solution of chloride of zinc at 52° .. | 245 grammes. |

The first six substances are separately ground and reduced to fine powder and then mixed in a mortar of glass or china. The solution of chloride of zinc is slowly added, while the contents are kept rapidly moved with the pestle so that no lumps shall be formed. The soft mass is then poured into an earthen pot, and, if kept covered, will keep in good condition for months.

Gummata of the Lymphatic Glands of the Neck simulating Scrofula.—

DR. ALLEN presented a case of this affection with the following history: Mrs. Schultheis, Ireland, aged forty; father living, mother died of phthisis. Four years married; no children; no miscarriages; no periods for over a year. Was

never sick until about August 20, 1888, with the exception of an ulcer at the age of three years just above the right elbow, which she was told had been very hard to heal and had been called in Ireland "running worm" or "king's evil," and was finally cured by a charm placed upon it by an old man. The scar of this ulcer is to be seen just above the right elbow.

No other eruption was ever noticed upon the body, and the health was good, with freedom from glandular enlargements, until the age of thirty-six.

In August, 1888, two symmetrical, painless tumors, which appeared like masses of glands above the inner third of both clavicles. The overlying skin was normal. These continued to increase in size, became softened, and in November the skin over one of them broke down and ulcerated. Through the opening a grayish mass of necrosed, stringy tissue could be seen and pulled out.

By June 22, 1889, though treatment had been neglected, original ulcers have healed and the masses disappeared, but there are now several new gummata on the sides and front of the neck, and just above the middle of the clavicles is a mass of semi-softened glands as large as half the fist.

Dec. 16th. Under specific treatment the gummata and ulcers were healed one month ago, but patient neglected treatment, as she has previously done whenever improvement had caused her to think she was well, and now she presents herself with a large mass of gummatous glands above the outer third of the clavicle, and several of the older lesions have taken on renewed activity, secreting pus which dries into grayish crusts. Patient says eyesight has failed and hair has fallen much since the enlargements came in the neck.

DR. FOX thought there was considerable doubt of hereditary syphilis in a woman of her age. Although some elements of the lesions looked syphilitic, there was certainly a strumous element present modifying the character of them.

DR. KLOTZ considered the disease scrofulous or tubercular, as the color of the lesions and crusts did not look syphilitic. The skin was very thin and undermined, as in struma.

DR. BRONSON said that, although he considered the disease as one perhaps resulting from syphilis, there was nothing indicative of syphilis at the present time. Gummata affecting the glands of the neck always presented certain characteristics if they had lasted for a long time. In this case there was no serpiginous character to the lesions or thickening of the skin. The disease looked more like struma.

DR. SHERWELL agreed with Dr. Bronson as to diagnosis.

DR. LEWIS said that the general appearance of the lesions looked like the tubercular glands so frequently observed in children.

DR. JACKSON considered the case as one of struma from its color, thinness of the skin, and character of ulcerations.

DR. ALLEN said, in conclusion, that he had no doubt of the syphilitic nature of the lesions, and, though the appearances were much like those usually seen in scrofula, improvement had been more rapid under mixed treatment than would be accounted for by the known curative effect of the iodide of potassium in tuberculous or scrofulous glandular affections. At

the suggestion of Dr. Fox, he would continue treatment by mercurials alone, and would endeavor to present the patient at a subsequent meeting.

Lupus Erythematosus.—DR. KLOTZ presented a case of lupus erythematosus, which he had reported as Case II of his thesis, and who had previously been before the society at its one hundred and eightieth meeting. The lesions on the left ankle and the left thigh are now practically healed, and the condition of the affected portions is very favorable. The resulting scar is nowhere thin or paper-like, but rather tough and resistant, bearing on some portions rather a thickened corneous layer. Only on those localities on the dorsum pedis mostly exposed to the pressure of the shoe there appear a few small reddish spots of somewhat softer tissue, into which the point of the thermo-cautery penetrates more easily than at other points, but without being followed by suppuration. The persistent hypertrophic papillary portions of the original lesions have been gradually destroyed by the thermo-cautery. The entire absence of any tendency to suppuration or rapid degeneration after numerous applications has been very remarkable, and would hardly be found in a real lupous tissue. After the dissenting opinions of several of the members of the society present at the one hundred and eightieth meeting, and after the critical review of Brocq in the *Annales*, Dr. Klotz had reconsidered his diagnosis very carefully, but he had not been able to convince himself of the lupoid nature of these lesions, which, during a period of observation extending over four years, always presented a sharply defined, coherent, reddish edge, which was one of the characteristic features of the case, and never showed the observation of any distinct brownish nodules either within or without this wall-like outline, besides the perfect dryness and great resistance to suppuration.

In relation to some pigmented scars on the leg of the patients, Dr. Klotz stated that they had been considered as very suspicious of syphilis at one time, but they were not more affected by antisyphilitic treatment than the papillary lesions, and finally healed under simple treatment. He communicated some experience, which had rendered him somewhat more cautious in adjudging the syphilitic nature of pigmented scars on the legs, even of solitary ones in the region of the knee.

Dr. Fox said that he had seen a number of cases of lupus erythematosus which had appeared only on the hands and extremities, but the diagnosis in all such cases was difficult. Some of the patches and pigmentations certainly looked very syphilitic below the knee, and, although the patient did not seem to respond to specific treatment, the disease might be syphilis.

Dr. SHERWELL said that the disease had been so long under treatment and the lesions modified by it, he did not feel like giving an opinion, although the scars did look syphilitic.

Dr. BRONSON saw nothing syphilitic about the lesions as they appeared at present.

Morphœa.—DR. SHERWELL presented a case of this disease with the following history: Mr. T. W., aged seventy, married, always had good health, except an ordinary attack of rheumatism eighteen months since. Habits of life extremely temperate and measured. Never had suffered any traumatism in site of lesion.

First seen by me November 25th; had been till then under the care of Dr. F. Ross. Patient gave history first of an acute erythematous blush over a part of the abdomen, the center corresponding to the intersection of the lines of the right lumbar, umbilical, inguinal, and hypogastric regions, which was followed by the appearance of a patch-like discoloration, somewhat elevated, and of a leathery appearance, less in extent, being roughly about four inches by two inches and a half in size, and also atrophy of pigment following in the neighborhood by slowly extending and coalescing spots and patches. A sort of bulla appeared on the center of the patch at one time, and a hydromatous condition is now present at various points on the surface. One of these was lanced by the doctor in attendance at one time; no particular results followed.

The trouble commenced about the middle of August last; no traumatism had ever occurred. Induration was marked, pains intense and sometimes lancinating, and burning after the first fortnight. The pains have been lessening in intensity for the past six weeks, and now, whether or not from treatment, have relatively disappeared.

Dr. Ross had used a variety of mild applications, and had given tonics, etc., but, owing to his inability to make a diagnosis, his local applications were fortunately for the most part simply protective. Once, however, he had used a mild chrysophanic unguent, but quickly stopped it. It is now, as I believe, decidedly better, under administration of Fowler's solution, ℥. iv, four times a day, and dressing with cold cream.

DR. BRONSON did not consider the disease morphœa, as it did not show the characteristics of that affection. There are a great many conditions of consolidation of the skin not due to morphœa. He had seen a great many cases of morphœa shown by Hutchinson—all typical cases—lesions circumscribed, color characteristic, irregular margin, and very hard, like some foreign substance mortised into the skin. It seemed to him that the lesion in the present case was too acute for morphœa. Such conditions as present in this case usually pointed toward some malignant skin disease, as sarcoma.

DR. LEWIS said that the appearance of the lesion suggested sarcoma, but he would certainly examine microscopically to aid in the diagnosis.

DR. SHERWELL, in conclusion, said that the lesion certainly presented extraordinary and atypical manifestations, and on first acquaintance he considered it as sarcomatous; but, on further study, the hardness of the lesion, the bullous condition on the surface of it, the affection of the lymphatics producing the atrophy of the skin, and the white patches, all tended to the diagnosis of morphœa, which he now diagnosticated it.

Furthermore, the disease was improving from day to day under treatment of arsenic internally; the induration was decidedly less, and the center of the lesion was healing rapidly. Involution had started before arsenic was given. He would now stop the arsenic, and believed a cure would result by natural processes unaided.

Selections.

A Contribution to the History of Syphilis.

THE earliest history of syphilis is enveloped in obscurity. It is certain that this disease was not brought from America to Europe, as it was formerly thought, but before its epidemic appearance in Europe, toward the end of the fifteenth century, it existed there. Most probably it existed there in ancient time. Impure affections of the genitals, which one can only regard as syphilitic, were described by the European and Oriental writers on medicine of the ancients as well as those of the middle ages. But the connection between the primary affection and the constitutional symptoms wholly escaped them; these latter are thrown together by them in company with a number of other diseases, especially leprosy. Only at the beginning of the fifteenth century was syphilis regarded as a specific disease.

Hence the more interest which a medical work should excite dating from the beginning of the ninth century, which, up to now, must have been wholly unknown in Europe, and to which I take the liberty of calling the attention of the reader.

It comes from a land the first knowledge of which was brought to Europe about five hundred years later, from Japan. It bears the title "Dai-do-rui-shin-ho" *—i. e., collection of recipes, arranged in classes, from the period of "Dai-do," and it was written in the year 808, according to our method of reckoning time; also, in this direction, the book is of great interest.

As is known, the Japanese obtained their medical knowledge, as well as their culture, from China. Up to the most recent time, and to a great extent to-day, the Japanese physicians obtain their knowledge from Chinese works; and the Japanese works which were written in Japan were chiefly excerpts and compositions from the old Chinese literature. In some favored cases they were swelled by observations of the composers.

Different, however, is it with the work here described. This is of pure Japanese origin. There seems to have been quite a well-developed medical art in Japan before it came into contact with China, but it was gradually displaced by Chinese medicine later on. During the period of Dai-do (806-810), the then emperor, Heizei-Tenno, commissioned his two body-physicians, A-be Ma-nao and Idzu-mo Hiro-sada, to collect and preserve the remaining native medical knowledge.

Thus originated this work. Unfortunately, it appeared to have remained unknown, and hence to have had no influence upon Japanese medicine; although the work itself is to be marveled at for the time and people. It contrasts favorably with the Chinese literature, so often losing itself in philosophical speculations. Only at the beginning of that century, in the period of Bunkwa, was it printed for the first time, but in an incomplete manuscript. In the year 1827 a certain Buddhist found it in a temple in the province of

* In the Japanese words the vowels are to be pronounced as in German, the consonants as in English.

Bungo, upon the island of Kinshin, in a well-preserved manuscript, and edited it, since when the book has several times been issued.

It resembles the two oldest Japanese works written, "Kajiki" and "Nihongi," in Yamato Kotoba, the old language of the Japanese nation, but written with Chinese characters, a method of writing long since fallen into disuse, and hence the work is by a Japanese of the present day understood with difficulty. Many black squares mark illegible places in the original manuscript. The book is divided into one hundred chapters. The first thirteen contain a list of remedies; but in the remaining chapters, one hundred and twenty-two various diseases, respectively symptoms of disease, are described.

Among these is also syphilis. The places referred to are found in the ninety-fourth and ninety-fifth chapters.

I quote them in translations true to the original text, for which I have to thank my former pupil, Mr. Kayama, of Kioto. The signification of several names of diseases here given was not to be determined, although several learned Japanese authorities were consulted.

The ninety-fourth chapter is as follows :

"Kata shine Kasa"—i. e., one-sided eruption on the femur.

"At the fold between the root of the thigh and abdomen, erythema and swelling, accompanied by violent pains and heat. After a few days it passes on to suppuration, and opening, much pus is discharged."

"Mara Kasa yami"—i. e., an eruptive disease of the penis. "At the beginning a swelling, painful, the size of a millet-seed. After several days an ulcer and evacuation of pus."

"Fuse Kasa" (i). "In the vesicle of the eruption there is water contained; this appears especially during the summer. The penis is very much swollen and thickened; the swelling spreads over the entire penis, and no opening can be seen from the outside. Pus flows out of the skin."

"Shiri mara Kasa"—i. e., ano-penile eruption. "At first the eruption is confined to the above-named parts. Then ulceration with pains; after a few days the suppuration increases and the glans falls off. After this the ulceration gradually spreads posteriorly, the penis falls off, and the ulceration passes over to the scrotum."

"Hashiri Kasa"—i. e., running eruption. "The virus of the penile or femoral eruption ascends, and a running discharge follows. Heat and rigors appear, and the bones of the extremities are painful. After a few months a small eruption, painless, and with no itching, appears upon the back and face. A yellowish fluid discharges therefrom. A few months later the face becomes putrified and stinks, and pus is discharged."

To this is annexed the ninety-fifth chapter.

"Hone-no-hari-Kasa"—i. e., an eruption "marked by bony swellings. After healing of the penile eruption the joints pain, so that they can neither be extended nor flexed. There is general heat, then the poison ascends and various bad symptoms make their appearance, against which the following recipes are to be used. . . . The bones become painful, the sick man becomes feverish, lasting the entire day, and he can not eat. There is constipation; the urine is red and voided with difficulty."

"Nondo fuki Kasa"—i. e., pharyngeal eruption. "The remaining poison

of the penis ascends, the membrane of the pharynx swells, and the sick man has pain. After several days suppuration appears, much pus is discharged, and gradually decay sets in, which does not heal for several years."

"Ana Kasa"—i. e., pinched-out eruption, and "hi Kasa" (?). "The remaining poison of the penis ascends and destroys face or head. For several decades there is no cure possible. The poison yet remaining takes its seat in the head, and destroys the skin, flesh, and bones. Then the ears are either destroyed or there is a nasal discharge. The nose falls off, blindness appears, or the entire lower extremity swells and pains for several years; then they decay. The virus destroys the entire body, or the scrotum is covered with an eruption. It swells and decays, or comes to the formation of numerous holes. Thereupon the entire surface of the body is destroyed."

"Mimi-no-hi-Kasa"—i. e., ear-eruption. "The remaining poison ascends, and roaring in the ears, with difficult hearing, makes its appearance. After several months violent pains appear, and a purulent fluid flows from the ear. Then there is no more roaring, but the patient can no longer hear."

These are the places which refer to syphilis in "Dai-do-rui-shin-ho." We see, according to the order of their appearance, the bubo, the chancre, the œdema preputii, the phagedenic chancre, the exanthemata, the bone and joint affections, the ulcers of the fauces, and the grave tertiary symptoms described in a few words, and finally the otorrhœa, which hardly belongs here.

The relation of all these affections was known to the writers, hence they regarded syphilis as a specific disease. Whether they regarded it as contagious, especially if transmissible by sexual intercourse, is not to be seen, for the Chinese and Japanese medicines regard other non-contagious diseases as originating in especial poisons.

As regards the method of treating syphilis which is recommended in the "Dai-do-rui-shin-ho," I am sorry that I can not give any particulars, as the places in question could not be translated.

They are chiefly names of plants, which are mentioned among the remedies, but which plants are now thereby understood can scarcely be known. The mercurial treatment of syphilis the Japanese appear to have learned from the Europeans.

In addition, the names may be added which are now used in Japan for syphilis. The scientific terms are "Bai-doku"=poison, and "So-doku," "so"=eruption. The people call this disease "Kasa," or "Huje."—*Dr. B. Scheube (Leipsic), "Virchow's Archiv,"* Bd. xci, p. 448.

Some Unusual Forms of Dermatitis Venenata.

DR. JAMES C. WHITE reports, in the Boston Medical and Surgical Journal, December 12, 1889, three cases of dermatitis venenata from unusual causes :

CASE I. *Chlorine*.—A school-girl, aged eighteen, consulted me on account of an inflammation of the face. It had begun forty-eight hours previously. The skin from the middle line of the forehead downward was uniformly red, swollen, and presented considerable areas of papules, vesicles, and oozing points. The eyelids were half closed. The neck was in an erythematous state as low as the level of the dress, where it abruptly ceased, forming thus a sharply defined margin to the inflammation. The subjective symptoms in

the part were great itching and burning. The whole aspect was that of an intense, artificial dermatitis of an eczematous type.

I in vain sought for a plausible exciting cause. The patient denied a possible contact with any well-known irritant, or exposure to any unusual influence in her surroundings. She had experienced no digestive derangement or constitutional disturbance. A local treatment, adapted to an acute eczema of a grade of intensity indicated by the cutaneous lesions present, was ordered.

Four days afterward the patient returned and stated that she had thought in the mean while of a circumstance which might account for the trouble. Forty-eight hours before the attack she had been engaged at school in making chlorine gas for the purpose of testing its bleaching properties. She had turned hydrochloric acid upon black oxide of manganese in a jar, and the gas thus generated had come in contact with her face, held just above the jar, in such quantity as almost to suffocate her, and oblige her to run to an open window. The inflammation at this second visit was greatly reduced, all parts of the face, excepting the left cheek, which was still occupied by a crust, having already subsided into the scaling stage of convalescence. There can be no doubt, in my opinion, that the exciting cause of the dermatitis in the case was the chlorine gas.

CASE II. *Violet-Water*.—A girl, eighteen years old, presented herself at the skin department of the Massachusetts General Hospital with a fine papular eruption of bright redness, sharply defined in outline, upon the front chest. It was evidently an artificial inflammation, and on inquiry she stated that she had rubbed the affected part, some five inches square, two days previously with violet-water. At her second visit three or four days subsequently, at which time the dermatitis had almost wholly subsided, she brought the bottle of violet-water. It was a bright-green alcoholic preparation, and had a strong odor of orris-root, the usual substitute for the genuine perfume of violets in such cosmetics. The root of this European flag, *Iris florentina*, seems to possess acrid properties similar to those of our native *Iris versicolor*, and may well have been the irritating principle in this case.

CASE III. *Box*.—A young woman consulted me at my clinic for relief from an attack of acute inflammation of the face, which was uniformly and greatly swollen, very red, and thickly covered with a papular and vesicular efflorescence, and oozing areas. There was intense itching and burning in the part. I showed her to the class as an undoubted example of artificial dermatitis, although the closest questioning developed no evidence pointing to the exciting cause. I showed at the same time a well-marked instance of *rhus* poisoning, accidentally present, and called attention to the minute differences in the two affected faces, although both exhibited about the same degree of inflammation. There was a more uniform distribution of the dermatitis in the former, and the contents of the vesicles were not of the peculiar lurid tint which so often characterize the latter. There was an indescribable something in the picture of the disease which distinguished it from acute eczema. On the following day the patient returned to say that she had recalled the fact that twenty-four hours previous to the first visit she had made a decoction of garden-box and applied it to her scalp, for the purpose of pre-

venting her hair from falling out, and that the liquid had not only run down upon the face, but that she had subsequently washed her face with the rag used in applying it to the scalp. She had experienced no sensation of irritation of the scalp or face at the time. The patient was seen again five days later, and the inflammation was still severe in spite of the local treatment prescribed at the first visit. The scalp was not at all excited.

This border-plant of old-fashioned gardens, *Buxus sempervirens*, has been an object of suspicion for many centuries, as I have recorded in my work on dermatitis venenata, and belongs to the virulent family *Euphorbiaceæ*, which contains such cutaneous irritants as croton-oil, euphorbia, manchineel, stil-lingia, *Jatropha urens*, and hura crepitans. I have never before met with an instance of its action upon the skin, nor was I aware of its popular reputation as a hair-producing agent, which it may deserve like its relative, *oleum tiglii*.

Syphilis of the Central Nervous System.

DR. H. OEPFENHEIM (Berliner klinische Wochenschrift, Nos. 48 and 49, 1889) has added an interesting contribution to the foregoing subject. His position in the department of nervous diseases at the Charité has given him an opportunity to study many such cases during life, and to avail himself of the results of the autopsies in a number of them. He does not hesitate to ascribe the majority of the cases of cerebral syphilis to a diffuse new formation in the meninges of the base of the brain.

This is regarded by Virchow as the seat of predilection for brain syphilis, and was also found to be the case by the author in five autopsies performed at the Charité; it is true as well of the cases which take a more favorable course.

The histological appearances of the diseased tissues the author illustrated by microscopical preparations and drawings in so far as it was necessary to a correct understanding of the clinical picture of the symptoms. The large vessels of the base of the brain he found always to be involved, even when macroscopically they were unchanged, this endarteritis frequently leading to complete obliteration of the vessel's caliber. The chiasma opticum is a favorite situation for the new formation, as are also the regions of the oculomotor and other cerebral nerves. The symptomatology presented by this class of cases he regards as pathognomonic, and as not likely to be confounded with that of the true brain tumors.

Among the most pronounced symptoms are headache, vomiting, vertigo, and spasms; a diminution of the intellectual powers, a certain degree of dementia, apathy, and loss of memory occur as a rule.

On the other hand, the long-continued and increasing stupor which characterizes the other brain tumors is not present. During the course of the disease, for the most part, the patient is fully conscious and, as far as his intelligence and memory will permit, can reply to questions; sudden attacks of loss of consciousness, however, lasting for hours or days, which can not be distinguished from ordinary sleep, or attacks of confusion of the intelligence, irritability, or madness, may supervene. These patients may, according to the stage of the disease in which they find themselves, seek relief in the clinic for nervous diseases, or become inmates of asylums for the insane. Among

the general symptoms in typical cases one often finds polyuria and polydipsia; they should always be inquired after, as, like all other symptoms, their duration may be transitory. Occurring with the symptoms before mentioned, or more frequently following them, in exceptional cases only preceding them, occur paralyses of certain cranial nerves—above all, of the oculomotor and optic nerves.

In certain cases one will only find a reflex immobility of the pupils; in such cases the history will show that a much wider extended paralysis has been present and has disappeared.

Loss of smell on one or both sides results not seldom from implication of the olfactory nerves in the syphilitic new growth on the base of the brain. Still more frequently occur disturbances along some of the branches of the fifth nerve—neuralgias or anaesthesia.

If the process extends farther backward, the facial or the acoustic nerves may become involved. All of the before-named symptoms indicate an extended new growth involving the base of the brain. In rare exceptions other tumors may extend and involve the same anatomical structures, as carcinoma. Tubercular meningitis of the base presents, as far as the paralyses of individual nerves are concerned, a similar picture, but can easily be excluded by its development, course, and presence of fever. The instability of the symptoms is the one thing above all others which characterizes this form of brain syphilis, especially in disturbances of vision and limitations of the visual field. In 1885 the author demonstrated before the Gesellschaft der Charité-Aerzte a case of meningitis syphilitica basilaris with the post-mortem record, in which the involvement of the chiasma opticum produced a hemianopsia bitemporalis which at one time was completely developed, at another time had disappeared to again reappear.

This same variability of symptoms has been observed of affections of the other cranial nerves, and of the headache, as well as of the polyuria and polydipsia. Hemiparesis or hemiplegia of apoplectic origin belongs to an advanced stage of syphilitic basilar meningitis, and usually ushers in an era of far graver import, though of not absolutely unfavorable prognosis. The implication of the arteria fossæ Sylvii or some of its branches in the obliterating endarteritis leads to disturbances of nutrition in the motor centers or tract, and finally to hemiplegia.

Inasmuch as the pathological process on the cranial base is older and more marked, so can one readily understand why a crossed paralysis usually occurs—*i. e.*, of the cranial nerve on one side and of the opposite half of the body. A double hemiplegia can also take place, and, in consequence of the implication of the basilar and vertebral arteries, the pons and medulla may be involved, giving rise to bulbar symptoms.

The course of the disease is chronic progressive, extending, as a rule, over a number of years, and interrupted by longer or shorter remissions. The prognosis is, of course, more favorable when the patient is seen before paralysis of the cranial nerves or hemiplegia occurs. The onset of the latter renders the prognosis much more grave, especially if it does not soon decline. The fatal cases seen by the author were those in which a mercurial treatment had not been begun or carried through, either because relief was sought too

late or because a correct diagnosis had not been made. The use of the iodides in the doses usually employed in Germany does not seem to the writer to prevent the fatal termination, though brilliant results are sometimes attained even by these small doses.

Symmetrical Keratoderma or Keratoid Eczema of the Hands.

A PHYSICIAN writes to the *Monatshefte für prakt. Dermat.*, December, 1889, for advice regarding a dry, scaly eruption of the fingers, attended by rhagades, much pain, but no itching or moisture, which has persisted for a year and gradually increased. A slight pityriasis capitis is mentioned. The editor, Dr. Unna, answers that two affections produce this condition: 1. Symmetrical keratoderma (Besnier), which does not belong to the eczema group, but is of suspected neurotic or trophoneurotic origin; and 2, keratoid eczema of the palm, which, according to his own belief, is always of seborrhœal origin, and would judge this to be the disease in question. As to treatment, he suggests curing the pityriasis capitis at once, and keeping the scalp free by the use of a five-per-cent. sulphur pomade. The affected regions of the hands should be covered with small cotton compresses wet in a two-per-cent. resorcin solution, and the whole hand bound up in a water-tight bandage at night, after washing the hands, so that they will not have to be washed when the vapor dressing is removed in the morning. During the day frequent applications of a zinc or zinc-and-mercury salve-stick, such as Dieterich has devised, is recommended.

Items.

Treatment of Erysipelas.—Koch, in the *Wiener klin. Wochenschrift*, 1889, No. 27, recommends an ointment of the following composition: Creoline, 1; iodoform, 4; lanolin, 10; to be applied with a brush over the affected part and for a distance of two or three inches over the healthy skin.

In twenty-five cases treated in this manner, after two or three applications a fall of temperature took place, the erysipelas was limited, and the skin resumed its normal color.

Two Cases of Scleroderma.—Hoppe-Seyler (*Deutsches Archiv für klin. Medicin.*, Bd. xlv, p. 581) reports two cases of scleroderma affecting two individuals from the same locality who were often thrown together and grew up under the same conditions. As the author was led to suspect an infectious origin of the disease, he examined skin sections removed from the diseased tissue for micro-organisms, but found neither cocci nor bacilli; cultivation experiments also yielded no results. The writer considers it very desirable that further investigations of like character be made in recent cases.

A Remedy for Chilblains.—The following salve is useful in this affection:

R. Zinc, sulph.,	
Ac. tannic	āā 2·0
Ung. aquae rosae	30·0 M.

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Original Communications.

HISTORY OF A CASE OF SYPHILIS FOURTEEN YEARS AFTER THE ONSET OF CEREBRAL SYMPTOMS, WITH REMARKS UPON SUBACUTE SPECIFIC MENINGITIS AND ITS TREATMENT.*

By R. W. TAYLOR, M. D.,

Surgeon to Charity Hospital, New York.

IT is my good fortune to be able to present to the society this evening a man who became syphilitic before puberty, and was attacked in less than two years afterward with a grave cerebral affection. This affection, which at one time threatened the integrity of his mind and gave evidence of leading to a lethal termination, was ameliorated under treatment, and I may say cured. The man then seemed to enter life anew, and has during a period of more than fourteen years appeared as healthy, in a mental point of view, as he was before the attack. But, although he was literally brought to death's door by his syphilitic cerebral affection, he was as careless and indifferent of his disease after as he was before its onset. The history of this case throughout is so interesting and important, particularly in its early and late phases, that I have gone back to my early records of it and have transcribed them, and have taken the opportunity to familiarize myself with its vicissitudes up to date:

A. W. came to me in September, 1873, with an indurated chancre of the penis. He was then of very light complexion, of frail build, and in rather poor health from irregularities of living and carelessness of hygiene. His family history, however, was good. His secondary manifestations were roseola, papular syphilides, and mucous patches of the mouth, and they were both extensive and persistent. Under mercurial medication these disappeared, and the patient then became indifferent and irregular in following treatment.

* Read before the New York Dermatological Society, January 28, 1890.

As he was a druggist, he proved to be one of those undecided and erratic patients so frequently observed in persons of that calling, who consulted every physician accessible to him, and was, therefore, for some periods under different modes of treatment. The result was that he was not at any time in the early stages treated with that care and thoroughness which are so essential in one so young and so frail. Though he was not under my absolute care, his case was continuously watched by me.

During the first year and a half of his syphilis he neither gained in health, strength, nor flesh, and off and on suffered from mouth and throat lesions. In July, 1875, in the twenty-second month of the disease, his nutrition was very poor, he was thin, pale, and sallow, and complained of weakness and of great fatigue at the slightest exertion. In this state headache, principally frontal, came on gradually, and he further complained of being more than ordinarily nervous. His condition then became promptly worse, for the reason that he neglected to take the remedies ordered for him. He became so weak and dejected that he could not attend to his duties, and his headache, which was continuous, became very severe, and was attended with nocturnal exacerbations. His skin was hot and dry, his mouth parched, his appetite poor and capricious, and his bowels were slow. During the day he experienced slight dizziness, buzzing of the ears, and much confusion of thought. This condition deepened until the patient was forced to take to his bed, and, on being seen by a physician, he was pronounced to be suffering from typhoid fever. His temperature, taken morning and evening, was from two to five degrees above the normal standard, and he suffered from the various concomitant features of the febrile state, such as small and frequent pulse, dry mouth and tongue, and great thirst; dry, parched skin, slowness of the bowels, and highly colored, scanty urine. His headache continued and became worse in the frontal region, and he was mildly delirious. He had during the day intervals of consciousness, but even then his intellect was rather obtuse. His delirium increased until it reached such a height as almost to be termed mania, but during his whole sickness he was never violent. The diagnosis of subacute meningitis from syphilis was made by me and iodide of potassium was ordered, while urgent symptoms were met by appropriate remedies.

There was no tenderness or gurgling on pressure in the right iliac fossa. After the tenth day from the date of his going to bed amelioration in the condition of the patient was noted. The delirium ceased, but his mind was left in a clouded condition. Thoughts came slowly and words and actions made slight impression upon him, such was his obtuseness to the surroundings.

He still continued to be very weak, and his headache was replaced by a dull sense of heaviness, bordering upon pain. In the upright position he became very dizzy, and he saw vague, indefinable objects. All of the bad symptoms, however, gradually grew less pronounced and the patient's strength slowly returned. The iodide of potassium was continued in increasing doses and quinine was given as a tonic. In a month he had sufficiently recovered to be able to walk in the street. At this time I noted that his mental faculties were considerably impaired. Instead of a quick and rapid answer (as was his wont to give), he hesitated very much over his

words and spoke slowly and deliberately, it being evident that he had to make an effort to express himself. On addressing him he did not seem on some occasions at first to comprehend my meaning, and for fully a minute waited to collect his thoughts. At other times he made improper replies, or used words wholly inexpressive of what he desired, but he quickly corrected himself, smiling feebly. His whole manner indicated obtuseness of the intellect; his memory was very weak, and, in order to impress a fact upon his mind, it was necessary to speak with force and decision, and often to repeat. Some of his remarks were simple and puerile and in marked contrast to his conversation previously, when he spoke with pertinence and animation. The expression of his countenance was much altered, for he presented a slightly silly, grinning look, his features appearing as if on a half-smile. His general expression may be summed up in the word *hebetude*. The fact of this obtuseness of intellect was strikingly manifested to me on one occasion about this time. The patient was standing, leaning upon one elbow on a desk, looking into the street, like one lost in thought, but his eyes seemed vacant and the muscles of his face had so relaxed as to produce dropping of the jaw. The whole expression was that of silliness. On being spoken to, he turned and smiled feebly, and to a question as to what had occupied his mind and what he had seen, he replied that he had thought of and had seen nothing. Under the influence of iodide of potassium, tonics, and a careful *régime*, he slowly improved, and in six months from the onset of his nervous affection he was tolerably well. His mind gradually became clearer and sharper and his memory better. His facial expression became natural and vivacious; his headache was for a long time persistent, but slowly passed away, only to return after excitement or fatigue. It was, however, fully a year before he could be considered to be in a normal mental condition and able to stand the strain of work, prolonged mental effort, and to undergo excitement and worry without becoming agitated or lachrymose. The patient's history as thus far detailed is brought up to July, 1876, when he was about twenty-one years of age.

The symptoms of this case and of many similar ones which I have seen were undoubtedly referable to changes in the cerebral meninges, either of a hyperæmic or a moderately hyperplastic character, or perhaps of both. It is an admirable illustration of subacute syphilitic meningitis, of which affection I may say I was one of, if not the first to offer a sharply systematic clinical description. The group of symptoms which constitute the affection are of quite constant occurrence and of very wide range, but it is usual that all may not be present in any one case. The history of these cases usually reveals an antecedent period of ill health, either largely due to neglect or want of treatment, or to bad habits and unbridled indulgence. In many cases a lowered condition of the system, malaria, and a neuropathic tendency are contributing causes. The most constant prodromal symptom is headache, which may be local, diffused or general, continuous or intermittent, or of nocturnal occurrence. This headache is in most cases accompanied by anæmia and cachexia. Patients thus af-

fects complain of great weakness, become easily fatigued, and are indisposed to physical and mental effort. They may become much emaciated or may retain their weight while they come to look fat and flabby. Then evidences of mental impairment show themselves in desultory or rambling conversation, uncertain and even incoherent utterance, want of memory and of clear perception, and in a general dullness and torpor of the intellect.

In cases like those related in this paper it is very probable that the morbid process is in the meninges of the outer portion of the brain. When the basal portion is affected we find various forms of paralyses.

The habits of these patients become more or less radically changed; a person quick of comprehension becomes dull and stupid; vivacity may be replaced by apathy and moroseness, and amiability of disposition may be changed to a directly opposite state, showing itself in faultfinding, grumbling, suspiciousness, quarrelsome, and all manner of ill-nature and unkindness. They become unduly emotional, laugh or cry at the slightest cause, and gradually lose their normal facial expression, which is replaced by a look of stupidity or of hebetude. In this state paralyses, local and general, are quite frequently observed, and the special senses are more or less impaired or perverted. When the morbid condition is still further advanced, these patients take to their beds, and I have a number of times found them under treatment for typhoid fever. The pulse ranges from 80 to 110, and is usually full and not wiry, though sometimes it is the reverse. There are, however, no abdominal symptoms, as in typhoid, nor usually the mild hyperæmic patches of that fever.

I recall very vividly, however, one case of subacute syphilitic meningitis in which there was a coincidently fading and a newly appearing erythematous syphilide over the whole chest and abdomen which the attending physician had taken as a well-marked but unusual development of the typhoid eruption. In bad cases the tongue becomes dry and cracks, and sordes collect on the teeth and at the angles of the mouth.

The onset of this affection may be in the early months of syphilis, in the first or second year, and even later. In my experience it has most commonly occurred within two years of infection, though I have seen it in patients five and six years after that date. It may be stated as a general rule that the more diffused instances of syphilitic meningitis are found in the early months and in the first two years of the disease, and that at later periods the morbid affection is more localized, and may even be unsymmetrical in its development.

I have seen early in hereditary syphilis well-marked subacute meningitis, which has yielded quite promptly to appropriate treatment; I have also seen cases which were rather rebellious to medication.

The case now under consideration was treated by me according to the

views which were at the time of the occurrence of the nervous affection (1875) most generally received—namely, the persistent administration of large and increasing doses of iodide of potassium. A large subsequent experience has taught me very forcibly the necessity for the combined use of mercury in the form of inunctions with the iodide in all cases of early syphilis particularly, and even as late as the sixth or seventh year, and sometimes even later. By this combination very often much more prompt results may be obtained than follow the use of the iodide alone, and the necessity for such massive doses of that salt as are deemed essential by some has been obviated. In this connection I think I may with benefit report, with all possible brevity, a case of syphilis, with meningeal and osseous lesions of the cranium, which was treated according to the views just enunciated with the most marked and gratifying success.

The clinical features of the case are very interesting, particularly when they are contrasted with those of the previous case :

A woman, thirty-one years old, became syphilitic three years previously, and suffered from persistently relapsing eruptions of a papular and tubercular character. She followed treatment at intervals in an indifferent and spasmodic manner, occasionally under my direction, and was during this period given to dissipation and addicted to alcoholic indulgence. In the second year of her disease she began to complain of headaches, particularly at night : her nutrition became lowered and her strength impaired. During six months she took medicine, patented and otherwise, at random, and received no relief. As her sufferings continued, she sought a specialist in nervous diseases, who informed her that she had congestion of the brain, ordered bromide of sodium in full doses to relieve her pain, and directed that she should take an occasional hypodermic injection of morphine to induce sleep. In July, 1884, I had seen the patient and diagnosed syphilitic pachymeningitis, with involvement of the bones of the cranium in scattered spots. The treatment then ordered was not carried out, and the patient gradually drifted into the condition just described.

In February, 1885, the patient presented the following conditions : She was much emaciated and utterly abject, and she had no appetite and had not partaken of solid food for several months. She suffered from continuous headache, sometimes dull in character, and again of neuralgiform type. To the touch the scalp was very sore and sensitive, and pressure on a number of spots caused excruciating pain. She suffered from persistent insomnia, and when she awoke from occasional short naps felt wretched, dejected, and in pain. She could scarcely sit up, and if she attempted to walk, her movements were of a shambling and shuffling nature, aided by support from attendants, or by leaning on the articles of furniture. Her temperature averaged 100 F., and the pulse was frequent and thready. To add to her deplorable state, she had become habituated to morphine, which was administered frequently during the day and night to the amount of about two grains daily. Her husband thought she should go to the Hot Springs, but saw very plainly that she could never reach there. At the time of my first visit in February the pa-

tient was under the care of my accomplished friend, Dr. C. E. Lockwood, who at once asked my aid in treatment. The patient was then taking about two drachms of iodide of sodium, together with varying quantities of bromide of potassium. We promptly reduced the quantity of morphine to one quarter of a grain in two doses daily, and gave a quinine and nux vomica mixture. Then we caused to be rubbed into the sides of the neck, the nucha, and over the painful spots on the scalp, thirty grains of strong mercurial ointment every night. In two weeks, during which the pain had been severe and the general condition seemingly not much altered, the stomach became more tolerant, and we began the use of iodide of potassium in twenty-grain doses three times daily. Though we strove hard to keep the quantity of morphine at the quarter of a grain standard, on some bad days we were forced to allow a little more. By very slow degrees, amid much trouble, pain, weakness, and depression, the patient gradually improved. As she bore the daily inunctions very well, and there were no contra-indicating symptoms, they were kept up with tolerable regularity. Toward the end of March (the patient then being under this treatment about fifty days) evident signs of marked improvement appeared. The appetite was better, and digestible solid food could be taken in sparing quantity: the mental caliber of the patient was stronger, she began to increase in weight, and her general physical condition was better than it had been for a year. Still continuing the iodide of potassium until in the end three hundred grains were taken daily, and the inunctions, with occasional omissions, we kept the patient upon tonics, and surrounded her with every hygienic advantage. Late in April the use of morphine, which had been slowly and painlessly reduced, was abandoned, and then there was no drawback to prompt recovery. We continued the internal use of the iodide and the guarded applications of mercurial frictions until late in June, when the patient declared herself quite well, and refused all further medication and restraint. The pain in the head degenerated to soreness, and this gradually passed away.

This woman has not since suffered from any manifestation of syphilis, and can hardly be said to have followed systematic treatment since June, 1885, yet in this interval she has committed many mistakes in the too free indulgence in alcoholies.

It is important in the treatment of these cases of cerebral syphilis that the mercurial ointment should be rubbed, if possible, upon the neck or upper portions of the body, in order to act upon the lymphatic system as near as possible to the brain. With care and attention to the local reaction which the inunctions may induce (but not necessarily), the regions of the neck and even the scalp may be utilized for sufficiently long periods to insure amelioration or cure of the case. Few cases are seen in a much more deplorable condition than the one just detailed, yet, by careful technique, we were enabled to continue the use of the inunctions for a long time.

Not only in cases of syphilitic meningeal lesions, but also in those of arterial degeneration, of extensive and localized paralyses, epilepsy, dementia, and of the various syphilitic neuralgias, will this combination

treatment prove beneficial and very often be followed by the most prompt and brilliant results, as I have so often seen. The regional use of the inunctions is, in my judgment, a great aid in promptness of cure.

Returning now to the case which is my text for this evening, I may say that the patient, having suffered from meningeal inflammation for rather more than six months, seemed then to recover entirely. In the latter part of 1876 it was noted that his mind was as clear as ever it was in his life, that his memory was normal, and that his mental grip (if I may use that term) was as strong as it ever had been. This condition of the cerebro-spinal system has thus remained ever since. This and similar cases having a like termination have convinced me that grave syphilitic lesions of the brain may be cured by prompt and efficient treatment, and that the normal status of that organ may be conserved.

This patient took medicine for a short time after his recovery, and then became careless, until 1878 he suffered at times from rheumatism of the knees and shoulders, which was sometimes continuous in its painfulness and at others attended with nocturnal exacerbation. At this time he presented an ulcerated gumma of the left ankle and corresponding elbow, both of which left cicatrices.

In January, 1880, he was married to a healthy young woman, who, in November of the same year, gave birth to a son who has at no time pre-



FIG. 1.

sented any evidence of syphilis whatever. During this year the father was evidently in the power of the syphilitic diathesis, for he suffered from specific inflammation of the right knee-joint. Just before the date of his wife's conception he took an active antisyphilitic course of treatment, and

to this the child's integrity may undoubtedly be referred. Three years after the child's birth (1883) the father was attacked by ulcerating gum-



FIG. 2.

mata of both legs, with large nodes on the tibiæ; then, in 1885, a serpiginous syphilide of the right shoulder and of the right side of the trunk appeared, ran a chronic course, and ended in deep cicatrization. During the three following years he suffered from small gummata and rheumatism, and was indifferent about treatment.

In 1887 a second and perfectly healthy child was borne by his wife.

In 1888 a localized gummatous infiltration began in the palm of the left hand, near the base of the thumb. This has increased up to the present time, when we find the whole dorsum of the left hand and of the little finger and the lower third of the forearm the seat of gummatous infiltration which has become ulcerated in spots and patches, as shown in Fig. 1. This form of gummatous infiltration is very interesting and is less common than the nodular forms early and late. It occurs about the face and scalp, but most commonly on the legs near the ankles, and also upon the hands, as it has in this case, in which the right ankle is similarly affected. This form of gummatous infiltration begins with one or more nodules usually close to each other; then new ones appear in the immediate vicinity, and they all then seem to fuse more or less completely together and form a diffuse and irregular patch or surface. As the infiltration grows more extensive the skin and subcutaneous tissues become very much swollen from the accompanying hyperæmia and œdema. In this way the affected parts become very much enlarged and distorted. Owing to its chronicity, this form of gummatous infiltration upon the legs often induces such hypertrophy of the parts that a condition re-

sembling elephantiasis may result affecting the foot and the leg. This deformity also follows and complicates more localized gummata of this region, and also rebellious ulcerating tubercular syphilides. A view of the figure shows the extent of swelling and deformity of the hand, which was fast approaching an elephantiasic condition. There is also a large node on both ulnæ and an ulcer on the left ankle. Besides these lesions, we find that the metacarpal bone of the right index finger has become four times its natural size and of oval shape, constituting a condition interesting in its comparative rarity. Among a vast number of syphilitics, I have seen this affection rather more than twelve times. It is found in hereditary syphilis about as frequently as in the acquired forms, and in my experience is seen most commonly in very young hereditarily infected infants. In the acquired form of disease it occurs both early and late. In this case it began in the seventeenth year of syphilis, which is a rather late development, since in the acquired disease I think it is most commonly seen in the first six or seven years. We sometimes find these bone swellings have a rather rapid development; then again they are slow in growth. They usually cause no pain until they become so large that they produce injurious tension of the soft parts, or unless they fall into necrosis. In some cases, however, they are the seat of more or less severe pain. Other metacarpal bones may be thus attacked, but, as a rule, I think that those of the index and little fingers are the ones most commonly affected.

In contrast with this case I ask your attention to this plaster cast (see Fig. 3), made many years ago under my supervision. The patient was a child

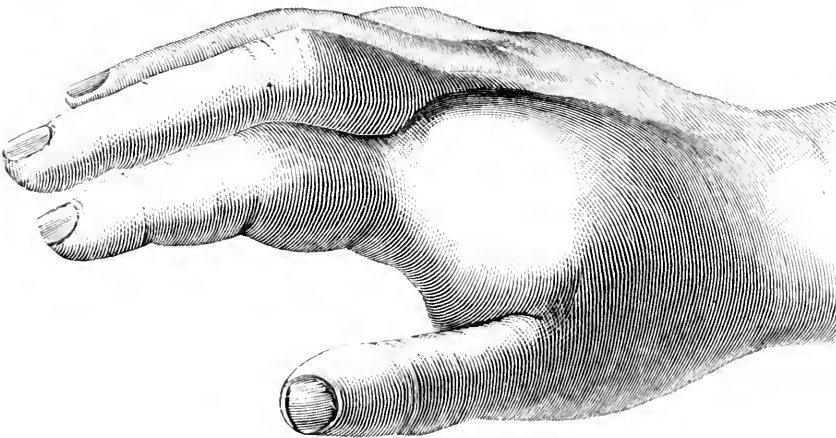


FIG. 3.

four years and four months old who became infected from her baby sister, the victim of hereditary syphilis. While presenting early and typical lesions of the skin and mucous membranes, the child began to suffer,

chiefly at night, with pain (which was thought to be rheumatism) at the lower end of the right radius, at the upper part of the left ulna, and on the metacarpal bone of the right index finger. The bone was greatly enlarged and presented a perfectly oval form. It was about an inch and a quarter in diameter in its middle, and then shaded off gradually at each end. It completely filled up the triangular space which exists normally between it and the metacarpal bone of the thumb, and the swelling was visible upon the palmar surface of the hand.

In its full development the diameter of the swollen metacarpal bone in this adult patient was fully two inches and three quarters. It is now rapidly subsiding under an active mixed treatment and appropriate local applications. There is also a small serpiginous syphilide upon the right arm. During the past six months the nutrition of the patient has become much impaired.

The second part of this man's history is scarcely less interesting and instructive than the first.

Recovering fully from his brain trouble, which has showed no tendency to relapse during rather more than fourteen years, he has been at intervals attacked by syphilitic processes in the skin, fibrous tissues, connective tissues, and the bones. These have been of large extent and of destructive tendency, yet his nutrition has not suffered very seriously until lately. In this particular this patient is like many other old syphilitics who, though they experience much damage and disfigurement externally, seem to be healthy internally. In other words, the integument and outer structures suffer severely, but the viscera seem to be wholly spared.

Then, again, we find that during this long period of grave gummatous infiltrations and of subacute inflammatory syphilitic processes this patient has procreated two healthy children, and that his wife has not suffered from any miscarriage.

Though this auspicious result is far from uncommon, it is none the less interesting. The birth of a healthy child from a father the victim of old syphilis, still presenting active and extensive lesions, may be explained upon the following grounds: First, that at the time of procreation the disease may have been in a quiescent or latent state; second, it may have been held in abeyance by treatment instituted some time before the impregnation of the mother; and, third, in the tertiary period, or, as we may call it, the stage of localized deposits, in many cases, unless specific lesions exist in some part of the generative apparatus, the spermatozoa may be perfectly healthy, although other tissues and organs may be the seat of syphilitic neoplasms or processes.

This man, under careful local and general treatment, as will be seen on inspection, is rapidly improving in his general health, while his lesions are correspondingly decreasing in extent and activity.

TUBERCULOSIS OF THE SKIN.

By JOHN V. SHOEMAKER, A. M., M. D.,
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TUBERCULOSIS of the skin is such a rare disease and its symptoms are so characteristic that I deem it worthy of recording the following case. After describing this case I will take the opportunity of reviewing the recent observations made upon tuberculosis of the skin, and will discuss the relations of this disease to lupus vulgaris:

A. J. A., male, fifty-six years of age, farmer, a native of Sweden but resident during most of his life in this country, was sent to me by Dr. Kirkland, of Cambridge, Ill., and admitted to the Medico-Chirurgical Hospital, Oct. 27, 1889. His father died forty-two years ago of some acute illness due to exposure. His mother is still living, is eighty-two years old, and comparatively strong and healthy. His maternal grandfather was a victim to alcoholism, but, with this exception, his ancestors and collateral relatives upon both sides have been healthy and long-lived people. He knows of no case of consumption occurring in his family. He is a widower, and has seven children living and in good health.

The malady from which he suffers made its appearance between thirteen and fourteen years ago. He had ailed for six months previously, but without definite symptoms or lesions. His usual vigor and energy had declined, his appetite had been poor and digestion weak. He states that when his skin became diseased the feelings of malaise disappeared.

The affection began upon the left cheek. A papule about the size of a split pea was observed over the region of the malar bone. Within a short period—a few weeks, as nearly as he can remember—the little swelling burst, discharging a small quantity of very offensive pus. At nearly the same time that this process began upon the face a papule of the same kind developed upon the chin and a third upon the back. The ulcer manifested no disposition to heal, but spread continually, and ten weeks after its first appearance had attained the size of a fifty-cent piece. Its base was at that time covered with pale granulations, which bled sometimes, when, on account of the severe itching to which it gave rise, he could not avoid scratching its edges or even its surface. It was the seat of darting pains as well as of itching. Caustic applications had been early made, but had only stimulated the disease to more rapid progress. At times the surface of the ulcer would become covered with a dark-gray scab. New papules continually developed just outside the edges, which they first raised and then, breaking down, merged with and extended the ulcer. About three months after the first manifestation of the disease the lesion upon the cheek and that upon the chin were removed by Professor Andrews, of Chicago. The open wound left after the operation was about two inches in diameter and nearly circular in outline. The sore upon the chin and that upon the back healed promptly and thoroughly, cicatrization proceeded favorably upon the cheek, and when the patient returned to his

home the wound was entirely closed with the exception of a small spot toward its upper edge. It was directed that this unhealed surface should be touched with a solution of chromic acid, but by some misunderstanding the crystals were applied. The result was most unfortunate, the recently formed cicatrix upon the cheek being destroyed and the ulcer extending more widely than before. With intervals of treatment and neglect the disease progressed for two years longer, when it was considerably ameliorated by the use of iodine and iodide of potassium in combination. When he began with this remedy the ulcer involved the whole left cheek, had spread upon the left side of the nose as far as the bridge, reached almost to the corner of the left eye, and ran up over the zygoma and temple to the left superciliary ridge.

The iodide effected some improvement. The forehead, temple, cheek, and nose gradually healed, and in these regions the disease remained in abeyance. From the posterior and upper edge of the sore, however, the same process had crept behind the lobe of the left ear as far as the base of the mastoid process. From the posterior and lower edge it spread down the side of the neck to a point about an inch and a half above the clavicle, where it changed its course and ran obliquely downward and inward as far as the interclavicular notch. At this spot it again diverged and proceeded upward along the middle line of the neck to the lower border of the inferior maxilla. But from the interclavicular notch another line of ulceration extended upward and outward to the middle of the right side of the neck. The ulcerated surfaces upon both sides and in the middle of the neck were narrow—about half an inch in width uniformly throughout—so that their appearance is best expressed by the term “strips of ulceration.” At the middle of the neck the strip was acutely deflected upon the right side, and, taking a horizontal direction, became confluent with the strip reaching from the interclavicular notch to the symphysis of the jaw. Again, from the sore upon the cheek the disease had spread in a horizontal line across the nape of the neck as far as the middle line, upon reaching which it descended vertically to a point situated over the fifth cervical vertebra. A little to the left of the vertebra prominens are five scars indicating the sites of healed ulcers. An ulcerated patch is also observed upon the scalp corresponding to the position of the space between the superior and inferior curved lines of the occipital bone.

It has been stated that at the beginning of the disease papules developed upon the chin and upon the back. These behaved precisely in the same manner as that upon the face. They were excised at the same time with the latter. The wound upon the chin healed promptly, and a small scar is discernible upon the right of the middle line over the situation of the mental foramen. The morbid growth never reappeared in this situation. The wound upon the back healed more slowly, but at length closed and has never reopened. The patient describes it as having been located over the ninth or tenth rib upon the left side between the angle of the bone and the spinal column. The scar must have been very small, and seems to have been obliterated in the lapse of time. I was unable, at any rate, to detect any cicatrix in this situation.

About a year ago a tubercle appeared over the upper half of the sternum a little to the left of the middle line. It broke down, the sore extended itself

gradually, and an oval ulcer is now present, measuring about two inches and a quarter in its long diameter and an inch and a half in breadth.

When admitted, the sores upon the neck and that upon the sternum were open. To day, November 22d, the condition is as follows: The left cheek is covered with a large, smooth, white, and glossy scar. The lower lid is everted. The strips upon the left side of the neck are well advanced in the cicatrizing stage, dry and partially covered with thin, yellowish scabs. The strip running horizontally across the right side of the neck is studded with warty excrescences of moderately large size. The lesion over the sternum is healing rapidly. A few very small warty growths project from its surface. The ulcers upon the back of the neck and scalp also are nearly healed. Just above the sore upon the scalp is a sinus which leads down to the bone, which is found, upon probing, to be necrosed.

The man's general health has remained good throughout the whole course of the disorder. He is still well nourished, has a good appetite and digestion, retains his muscular strength, sleeps well, and exhibits no sign of constitutional involvement. He has never acquired syphilis. Examination of the chest reveals on percussion dullness at the left apex. Since entering the hospital he has taken regularly a drachm of cod-liver oil and a drachm of sirup of hydriodic acid three times a day. To the ulcers has been applied an ointment consisting of: Hydrarg. ammoniat., gr. x; creosot., gtt. iv; cocain. hydrochlorat., gr. v; ung. zinc. ox., $\frac{2}{3}$ ss.; ung. aq. rosæ, $\frac{2}{3}$ ss.; pulv. marant., 3 j.

At my request, a microscopical examination was made by Professor E. Laplace, whose report I subjoin: "The microscopical examination of a piece of granulation tissue taken from the ulceration on the sternum of your patient revealed the following: Large masses of granulation cells fairly mixed with pus-corpuscles; a few blood-vessels; a large number of micro-organisms of suppuration. A section, being stained for the bacillus tuberculosis, revealed the presence of this bacillus. But three of these bacilli were found throughout the preparation. These would, therefore, point to tuberculosis of the skin as being the nature of the ulceration."

Prior to actual demonstration of the presence of the bacillus tuberculosis, judging only from the history of the case and the appearance of the lesions, I was led to consider which, among several grave disorders, was capable of producing such peculiar and inveterate processes of new formation, degeneration, and destruction of tissue. The affections to which my thoughts adverted were syphilis, epithelioma, sarcoma, lupus, and tuberculosis.

Later syphilis assumes such strange guises at times as to counterfeit some, if not all, of the diseases to which I have referred. But, without placing implicit reliance upon the mere statement of the patient, no feature of the case lends support to the theory that syphilitic infection is the hidden cause. The early exanthems could assuredly be dismissed. Their sudden onset, rapid development, characteristic color, and symmetrical and

general distribution are all absent. The retrograde changes of syphilitic tubercles or gummy formations might lead to ulcers resembling those with which the patient is afflicted. And the tubercles of specific disease, before the occurrence of ulceration, might be mistaken for those, develop, and break down upon the body of this man. The former are, however, scattered over a larger portion of the body; they exhibit the coppery hue distinctive of most of the cutaneous manifestations of syphilis. A number of syphilitic tubercles may simultaneously develop and break down, but they usually remain separate and distinct, studded here and there between areas of unaffected integument. They are deeply excavated; their edges are clearly defined and apt to be everted. Their surface is covered with an abundant and offensive discharge, and the scabs which form from time to time present a greenish hue. All these features are wanting in my case, and I can not consequently look upon it as one of syphilis.

Carcinoma must always be thought of whenever persistent ulceration is present. In this instance the malady has been, in its inception at least, non-malignant. Fourteen years is too long a period for the progressive existence of epithelioma, which seldom begins, moreover, at the early age of forty-two. The man complains of having suffered from sharp and darting pains at the seat of disease, yet he does not describe the agony which usually attends cancer. There is no cachexia or glandular involvement. The tubercle of epithelioma is hard; an area of infiltration surrounds it; the ulcer is deep, with hard, everted edges and ragged base. The diagnosis of epithelioma may be confidently excluded.

Sarcoma sometimes locates itself in the integument primarily. The new formation terminates in ulceration. In a certain proportion of cases, also, the neoplasms and resultant ulcers are more or less numerous and scattered in different situations. But this multiple development of sarcoma is almost invariably accompanied by pigmentation. The tumors are darkly colored in brown, blue, or black. They usually begin upon the hands, the feet, or the genitalia. In short, the case under consideration bears no resemblance, either in its course or present appearance, to sarcoma. The latter, again, develops and progresses rapidly. A few months suffice to produce retrograde action in the new formation; in a few months more internal organs become involved and a fatal issue speedily follows.

Lupus usually begins early in life. Extremely seldom is it found to develop after the thirtieth year. The new cells which compose its lesion are first deposited in the depths of the corium. An infiltrated mass of such cells, too deeply situated to raise the surface of the skin, devoid of color and transparent, acquires pigmentation as it is enlarged by a continued proliferation of cells. It approaches the surface, which it elevates, and may be discerned at this stage as a papule, of a yellowish or reddish-

brown color, generally rather soft to the touch, though occasionally hard. By successive additions the papule may become a tubercle and attain the acme of its development. Subsequent changes are retrogressive, and consist either of absorption of the new growth or, what is more commonly the case, of its necrotic degeneration and, ultimately, the establishment of an ulcer. Shortly before ulceration takes place the surface of the little tumor is often coated by a thin scale of ill-formed epithelium.

But the lesion of lupus is multiple, not single. A number of nodules are formed simultaneously within an area dependent upon the same source of vascular supply; and the relative position of these nodules exhibits a certain definite arrangement. They are grouped in such a manner as to describe a rude circle or semicircle. Individual tubercles in their growth assume a close juxtaposition. Nor is the tissue between neighboring papules, or included within a ring of grouped tubercles, altogether free from disease. Fresh nodules make their appearance, they become more closely aggregated, the older begin to ulcerate, and, as the degenerative process extends and tubercle after tubercle breaks down, the ulcers approach each other and coalesce. Thus it results that the ulcer of lupus is usually of a roundish, oval, or serpentine form. It results, also, that portions of the compound ulcer—if I may use such an expression—have advanced to the stage of cicatrization, while in other portions the granulations are fresh, florid, and vascular. The ulcer, therefore, readily bleeds.

Such is the picture of lupus vulgaris. The different stages of the affection are frequently open to observation at the same time in the same case. The essentials of the process are as just portrayed. During the ulcerative or cicatrizing stage an exuberant papillary outgrowth, which at times assumes a verrucous form, takes place, but these are accidental modifications and not characteristic or diagnostic of lupus.

The course of the present case has been altogether different. The disease did not begin until the man had arrived at the mature age of forty-two years. Some of the spots by which ulceration was preceded are present near the periphery of the ulcer of the breast, and are dotted here and there along a line running outward along the right clavicle. They are all minute, round, oval, or oblong in form—none exceed a quarter or a sixth of an inch in long diameter—and are of a rose-pink color. They are evidently little patches of cellular infiltration seated in the substance of the corium. Each spot stands apart from its fellows, a considerable distance of intact skin intervening. They are not grouped, and, as far as any plan of arrangement can be traced, it is rectilinear rather than curvilinear. Nor does the history point us to the formation of a true confluent ulcer. The ulcers upon this man's person have grown by peripheral extension. They have grown slowly but uninterruptedly by the successive deposition of new infiltrate material. The granulations have been pale, scantily

nourished, incompetent to form a scar. The infiltrated edge of the sore, the seat of a more rapid pathological action, betrays a brighter color than the general surface. There is less disposition to bleed than in the lupus ulcer. From the inception of the malady there had never occurred any attempt on the part of the sore to heal. The only scar which exists is that which followed the excision so many years ago.

Thus neither the natural history nor the morbid appearances coincide with those of lupus. The tubercles do not resemble those of lupus, the ulcers do not resemble those of lupus, the ulcers have not extended in the same manner as those of lupus; they bleed less readily, they give rise to more pain, and they have no tendency to heal. I was urged to the conclusion, therefore, that, from a clinical standpoint at least, the disease in question is not identical with lupus. But if not lupus, it must be tuberculosis.

The skin is very rarely the seat of tubercular disease. The deposit, in the few cases in which it does occur, is most frequently associated with lesions of the same nature situated in other tissues or organs. In a number of instances it has been but one of the manifestations of acute general tuberculosis. Of six thousand dead bodies examined by Chiari, tuberculous ulcers were found in no more than five subjects. Jarisch and Kaposi have contributed descriptions of a few cases which had come under their observation. The latter authority lays especial stress upon the peripheral spread of the ulcer by the successive deposit and disintegration of fresh tuberculous material. "Especially characteristic of tuberculous ulcers are the sinuous borders which appear as if gnawed out, and which, upon close inspection, are found to result from the sequence of little pits. In the vicinity are scattered here and there transparent or yellowish miliary tubercles." *

By minute examination of the clinical cases reported I have been convinced that the features of their career and the tissue alterations which they affect separate them from lupus vulgaris. These points of differentiation are well exemplified in the case which I now report.

The bacillus tuberculosis exhibits a marked predilection as to the organs and tissues which it attacks. Their accessibility, delicacy of structure, vascularity, heat and moisture, would seem to indicate the lungs as a favorite site. Glandular tissue also is quite amenable to the invasion and development of the pathogenetic micro-organism. We should scarcely expect osseous tissue to furnish a choice nidus for germ growth. Yet such is the fact, and tubercular disease of bones and articulations is sufficiently common, and not infrequently these are primary seats of tubercular deposit. It does not commonly manifest itself either as a primary

* Deutsch Med. Zeitung, January 12, 1882.

or secondary lesion upon mucous membrane, a tissue so analogous to the integument that the maladies to which each is subject are comparable, or even identical, much more often than is generally supposed. Dr. P. Schäferowitsch, of Heidelberg, for example, has recently published a study of all the cases of tuberculosis of the oral cavity known to literature. The number of these does not exceed eighty-eight, a wonderfully small proportion when we consider the apparent liability of the mouth to primary attack from bacilli contained in respired air or aliment, being the vestibule of both the respiratory and alimentary passages. Yet in a minimum of these eighty-eight cases was the mucous membrane the first locality attacked. It can therefore be no matter of surprise that the skin should so seldom, either primarily or secondarily, be invaded. Its close texture, its comparatively low temperature, and, above all, its epithelial shield, are facts which, perhaps, serve to explain the almost total immunity of the integument exposed, as it must frequently be, to contact with the causative bacillus. The pathology is essentially the same as in the case which I have described in this paper. A moderately hard tumor reaches a certain size—that of a pea, for instance—breaks down and forms an ulcer, while miliary tubercles appear around the edges of the sore, pass through the same stages, and coalesce with the border near which they are placed. The fact that tubercular infection of the skin ever occurred, whether as a primary or secondary lesion, was, until lately, strenuously denied. But it is proverbially difficult to maintain a negative. The presence of bacilli tuberculosis in my case proclaims its nature and origin as clearly as if the lesions had occurred within the lungs, in the substance of the liver, spleen, or kidney, within the hip-joint or dorsal vertebræ. Since Koch's discovery of the specific bacillus and demonstration of the relation in which it stands to the development of tubercular nodules and infection, a relation of cause and effect, we possess a far more reliable diagnostic criterion than the histology of tubercle and the form and size of its cells.

(To be continued.)

Gonorrhœal Rheumatism or Syphilis.—Dr. Schuster, of Aachen, in the "*Archiv f. Dermat. u. Syph.*," attempts to show that many cases of joint affection following gonorrhœa are to be referred to a complicating syphilis rather than to the gonorrhœa. His conclusions are as follows: After urethral blennorrhœa one or more joints may be inflamed in consequence of the local infection. Aside from this well-known form, the syphilitic poison may act in conjunction with the gonorrhœal poison, producing complications outside of the joints. The involvement of the calcaneus should cause one to suspect the co-operation of the syphilitic virus. If the tuberosities of the tibiæ, the sternum, or the os sacrum are simultaneously affected, the suspicion is strengthened and justifies a mercurial course. The association of iritis with the before-named affections renders the diagnosis of syphilis certain. The complication of endocarditis and pericarditis speaks rather for syphilis.

CLINICAL OBSERVATIONS ON INTRAMUSCULAR INJECTIONS OF
INSOLUBLE MERCURIAL SALTS IN SYPHILIS.BY HERMANN G. KLOTZ, M. D.,
New York.*(Continued from page 49.)*

MODE of Injection; Syringe; Needle.—The injections were made at first while the patient was standing in front of the table, leaning over, and his arms resting on the same. But later they have invariably been made with the patient lying upon the face, at his full length, so as to insure perfect rest of the muscles and to prevent any sudden movement of the patient, which might break or divert the needle from the intended direction. The central depression of the buttocks, about an inch and a quarter (3 centimetres) behind the great trochanter, is generally recommended as the best place for the insertion of the needle. I have found it safer to select a place somewhat nearer to the upper insertion of the gluteus, and about an inch outward from the intergluteal furrow, in order to avoid injury to the sciatic nerve as far as possible. In this locality the seat of the injection is not under pressure while the patient is in the sitting posture or while standing or walking, the greatest inconvenience being experienced while bending forward, particularly in putting on shoes or stockings. Subsequent injections on the same side have to be made somewhat farther down, following the line of about an inch from the anal fold. The spot selected is wiped with a little cotton soaked in a solution of sublimate or in alcohol.

An ordinary Pravaz's syringe, with a glass barrel fitted in hard rubber, is used; the ordinary needles of the hypodermic syringe, however, are not serviceable for the purpose, as they become easily clogged, even if glycerin or water and mucilage are used as a vehicle. My needles are at least twice as thick and of a correspondingly wider bore as the common ones, and are an inch and seven eighths (4.5 centimetres) long. The needle is introduced in a vertical direction into the body, being pushed in to its full length by one quick stroke, so as to reach the muscular tissue. Then I wait a quarter to half a minute to allow the muscles to become perfectly flaccid and to allow to pass off a quivering contraction, which usually follows the insertion of the needle, before slowly emptying the syringe of its contents. Under slight pressure around the point of insertion, the needle is then withdrawn between two fingers, which at the same time draw up the skin in a fold around the needle to avoid the oozing out of some of the fluid through the skin. No massage or friction is practiced, but a small piece of adhesive plaster is placed over the spot. After a few minutes the patient is allowed to rise and to go away on his business, being enjoined from muscular exertions for several hours. The syringe is washed out several

times with hot water, then with strong alcohol and again with water, and then put away in its case.

Composition of the Injected Fluid.—The salts of mercury which I have employed were calomel, the yellow oxide, and the salicylate, suspended either in water with the addition of some gum arabic, or in oil of vaselin or in olive-oil. Calomel was used altogether for fifty injections—one part in ten of water, thirty-one times; of vaseline, two; of olive-oil, seventeen times. The *yellow oxide* furnished the material for by far the greatest number of injections—one hundred and thirty-five in all—of which for one hundred and eight at the strength of 1 to 30 in water; twelve at 1·5 to 30 in water; six at 2 to 30 in water; nine at 1·5 to 30 in vaseline. The *salicylate* was used twenty-five times suspended in oil 1 to 10.

Distribution of Injections.—The greatest number of injections made on any one patient was twenty-four, the smallest three, excluding three patients on which single injections were made on trial, but not repeated or continued on account of the severe pain, and one series of Case 1 where the same cause prevailed against further continuance. This leaves two hundred and four injections for twenty patients, giving an average of ten injections for each. The following table shows the distribution of the injections over the cases, the number of series of injections each patient received, and the time after infection when each series was given :

TABLE II.

No. of case.	No. of injections.	No. of series.	Time of application of each series after infection.	No. of case.	No. of injections.	No. of series.	Time of application of each series after infection.
18....	24	4	3 months, 5, 10, 18 m.	16....	8	2	3, 16.
10....	22	5	2, 4, 8, 28, 33 months.	5....	7	2	5, 9.
7....	18	3	6, 8, 11 months.	11....	7	1	3.
14....	16	2	18, 21 m.	2....	6	1	Over 5 years.
8....	13	2	14, 16.	12....	6	1	15 months.
20....	12	2	2, 6.	23....	6	1	3.
13....	11	2	2, 5 (18).	21....	4	1	Over 5 years.
22....	10	1	3.	4....	3	1	18 months.
9....	9	2	2, 5.	1....	3	1	16 months.
19....	9	2	20, 24.				
3....	8	2	6, 15.		204	38	

The table shows at the same time that these two hundred and four injections were divided in thirty-eight series, which in every instance were separated by intervals of several weeks or months. One patient had five, one four, one three; nine each two, and eight a single series: five to six injections formed the average number for each series, and not less than seven days were allowed to intervene between single injections. The largest series contained ten injections, made within two hundred and sixty-six respectively ninety-five days, and eight in sixty-five respectively fifty-six days. In several instances injections of calomel and the yellow oxide were

combined in one series, and in one case (16) two injections of the yellow oxide were added to fifteen injections of the bichyanide, which had been made in the hospital; they were considered equal to ten injections of the soluble salt. The number and character of each series of injections, together with the time within which they were completed, are shown in Table III:

TABLE III.

No. of case.	Number of injections of series.	Time within which applied.	No. of case.	Number of injections of series.	Time within which applied.
		Days.			Days.
<i>1. Calomel in Water (31).</i>			<i>4. Hydrargyr. Oxydat. Flav.</i>		
1.....	3	45	14.....	10 (+ 1 Cal.)	266
3.....	4	28	18.....	10	95
2.....	6	106	7.....	8	56
4.....	3	35	8.....	8	65
5.....	4	21	10.....	7	52
7.....	4	42	10.....	7	71
10.....	3	14	11.....	7	48
			16.....	6	54
<i>2. Calomel in Olive-oil (17).</i>			12.....	6	96
10.....	4	38	7.....	5 (+ 1 Cal.)	45
	2	8	14.....	5	56
19.....	4	28	9.....	5	31
20.....	3 (+ 4 H. ox. fl.)	24 (54)	13.....	5	42
21.....	4	35	13.....	5	47
			18.....	5	52
<i>3. Hydr. Salicyl. in Oil (25).</i>			18.....	5	42
18.....	4	32	19.....	5	31
20.....	5	26	20.....	4 (+ 3 Cal. ol.)	54
22.....	10	64	8.....	4 (+ 1 Cal.)	34
23.....	6	34	3.....	4	55
			9.....	4	20
			5.....	3	38
			16.....	2 (+ 15 Bichan.)	30

Condition of Patients ; Stages of Syphilis.—The patients were all between the ages of twenty and thirty-five years except four, one of whom was thirty-eight, and three fifty years and over. Besides their syphilitic infection, including the low state of general health incidental to this disease, they were free from other organic or constitutional ailments except one, who showed signs of beginning tuberculosis of the lungs. Malaria, however, formed a complication in nine, all more or less severe cases, confirming the general experience of the aggravating influence of the malarial poison on syphilis.

In regard to the stages of syphilis in which the patients were at the time the injections were given, the last column of Table II indicates the number of months elapsed since injection for each series of infection. It appears therefrom that of the thirty-eight series, twenty-two were administered within the first twelve months, twelve within the second year, two in the third, and two more than five years after infection. Therefore

thirty-four come within the first two years, during which period we usually find the patients affected with secondary symptoms—lesions of the skin and the mucous membranes of the mouth and throat. In looking over Table I, in three cases the presence of an erythematous syphilide is recorded, in two instances the comparatively rare recurrent roseola in large patches; in fourteen cases papular syphilides, representing either the first eruption of the secondary stage or recurring eruptions, and assuming the different more or less scaly forms of the miliary, the small lenticular, the large, flat lenticular (Cases 7 and 8), or the scaling syphilide of the palms and soles, while occasionally single lesions on the body, and more frequently on the scalp, showed a more pustular character. In three cases, in two of which (1 and 18) the disease was of a decidedly malignant character throughout, the localized rupia form of the pustular syphilide was present, once ten months and twice fifteen months after infection. In Case 14 the tubercular serpiginous syphilide, rather a tertiary affection, was observed on the scalp, arm, and thigh, recurring after a pause of several months with a gummatous periostitis of the frontal and parietal bones. Besides these twenty-one instances of cutaneous symptoms observed during the first two years after infection, in nine cases affections of the lips, mouth, tonsils, and throat were recorded, six times of a rather mild, superficial nature, three times in the shape of deep ulcers of the tonsils and posterior wall of the fauces.

The two series of injections made in the third year after infection belong to Case 10. No symptoms of syphilis had been found for eighteen months, except a remnant of the very persisting primary induration of the frænulum, which, however, disappeared entirely after treatment had been stopped. Then twenty-eight months after infection a macular syphilide of large patches appeared on the trunk, followed in five months by a small number of papules on the same locality. There remain two series, which were applied more than five years' after infection, and in which lesions of decidedly tertiary character were present; in one (Case 2) a large gummatous infiltration of the thigh, probably originating from the periosteum, and in the other one (No. 21), after three years' absence of every symptom, complete paralysis of the external muscles of the eyes and other symptoms of cerebral affection.

Combination with other Medication.—With the exception of iron, extract of malt, and other tonics, where the general health of the patients rendered such auxiliary treatment necessary, as a rule no other medicine was given during the injections; but in the tertiary forms as well, where the more severe lesions of the skin and mucous membranes were present (Cases 2, 4, 16, 18, 21), iodine was given simultaneously. Several patients (Cases 9, 10, 13, 20, 22) were treated exclusively by injections. In six cases (3, 4, 5, 7, 8, 19) internal treatment had preceded the injections, but

was not continued after injections had been commenced, while in the remaining cases the injections did not play an important part in the treatment, other methods coming into use before and afterward.

Local Sequelæ of Injections.—The unavoidable occurrence of pain and the occasional formation of nodules and abscesses have been the most important objections against the injections of insoluble salts. After carefully searching my records, I can find but *two cases of abscess* and one of softening of a nodule with subsequent resorption. They all occurred after injections of calomel in water, and all within the first months after I began to practice the method; for a period of two years and a half I have not seen an abscess—none after injections of the yellow oxide or suspension in olive-oil of either calomel or the salicylate. It has been a common experience that abscesses have occurred during the first year of practice and have become less frequent or have disappeared altogether during the following years. This shows sufficiently that abscesses are due to some faults of application, and that they can be avoided by carefully observing every minute detail of precaution. But, even where they have occurred, they are not so formidable accidents, as they generally cause very little inconvenience after softening has set in, and, after breaking, heal within a few days under the simple cover of a plaster. There is no necessity of lancing them early, since resorption may take place even where hardly expected any more.

A somewhat more annoying consequence is the formation of either diffuse or circumscribed, more or less painful, swelling around the spot of the injection, which but rarely tends to softening or suppuration. As far as I know, no sufficient explanation has been given yet for this occurrence, direct injury to nerves or veins or lymphatic vessels by the needle or by the injected fluid having been held responsible. I have seen them appear when the injection itself had not caused any pain, and have missed them when a severe pain along the whole course of the sciatic nerve, following immediately after the injection, made me fear or expect some such injury. Out of the seven cases in my experience, five were caused by injections of calomel in water and two by the yellow oxide. In one case injections of calomel, the yellow oxide, and even the bichloride, which were tried in their turn, were always followed by swelling. In all instances the patients were obliged to stay at home for several days, partly in bed; ice, sometimes poultices and iodoform ointment, seemed to afford relief. Smaller nodules, about an inch in diameter, restricted to the immediate seat of the injection, were met with five times without, however, causing great inconvenience. Here again calomel in water was responsible for four of the nodules, and for one only the yellow oxide, so that of all the fifteen accidents, twelve were due to the injection of calomel in water, while the suspension of calomel or the salicylate in oil never caused any swelling. The

same can be said in regard to the occurrence of severe *pain*. It can not be denied that the injections of insoluble salts are necessarily followed by a certain amount of pain or inconvenience during certain motions of the muscles. Naturally, according to the character of the patient, the complaints will differ materially. Besides the fifteen grave accidents mentioned before, I find only five times remarked that the pain was very severe. As has been said, it is necessary that the patient be intelligent and conscious of the gravity of the disease to make him willing to bear the pain, especially where the question of exposure, of losing a position, etc., come into play. I could never believe that you could not find patients in this country intelligent to understand their position, or courageous enough to bear a certain amount of pain as an equivalent for some advantages, and I have not been disappointed, nor have I lost a single private patient on that account. Among my patients, five were born in America—three of German and two of American parents—and I have found them the most willing to bear the treatment, and asking me to resume the injections in preference to internal treatment in cases of relapse. The three patients who refused continuance of the injections were German-Americans, but only one, I believe, gave them up without very good reason, and he did not prove a diligent or conscientious patient otherwise. The remaining fifteen patients were born in Germany. Eight of these, like the five Americans, were engaged in some mercantile business, while one each was a barber, furrier, baker, machinist, saloon-keeper, and two were waiters. With the exception of the accidents mentioned, the patients were able to attend to their occupations throughout the period of the injections.

(To be Concluded.)

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

195TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Pityriasis Rubra Pilaris.—DR. ELLIOT presented a case under the name of pityriasis rubra pilaris, as it agrees exactly with the description of that affection as given by Besnier, etc. The patient is seven years old, and the eruption began in November, 1887, about the scalp and palms, and then gradually extended over the surface of the body. He has been under observation since last May.

DR. BULKLEY concurred with Dr. Elliot in his diagnosis. He had prepared a number of models of this disease which represented the lesions present in Dr. Elliot's case very exactly.

DR. FOX believed the disease to be of the same nature as that described by Hebra as lichen ruber and by Hutchinson as lichen psoriasis. He had seen eight cases of the same disease under various names, and they were all much alike. He considered it confusing to have so many names given to a disease which was undoubtedly, from the descriptions given and pictures taken, one and the same affection. He saw no special reason for the acceptance of the term pityriasis rubra pilaris, as other follicles besides the hair follicles were affected. The lesions often appeared white rather than red in cases not treated and where very little water was used on the skin, the color being due to the formation of little white scales. The eruption had a tendency to appear and disappear, but he doubted if the patients ever entirely recovered, though they would often improve for a time and then get worse again.

DR. KLOTZ agreed with Dr. Fox that the disease was undoubtedly the same as that usually described as lichen ruber.

DR. PIFFARD said that he considered pityriasis rubra a good name for the disease, but would not consider it a typical case of the pityriasis rubra of Hebra.

DR. TAYLOR said: Lichen ruber is a papular disease, and there is no need of using the French term pityriasis rubra pilaris, which is very objectionable and inappropriate for a number of reasons. To claim that the disease is not of papular nature is as absurd as it would be to deny the pustular nature of small-pox. This case can not be studied by gas-light in the limited time allotted for its presentation. It may be a case of lichen ruber, but I should want more evidence before me than has been offered this evening before I arrive at positive conclusions.

DR. ELLIOT concluded by saying that in his opinion the disease did not correspond to the lichen ruber of Hebra senior. It did, however, to the lichen psoriasis of Hutchinson, to the pityriasis rubra pilaris of Besnier and Brocq, and perhaps it was the same as the lichen ruber acuminatus of Kaposi, which at the Paris Congress had been questioned, and doubted as being the same as Hebra's lichen ruber. The case presented to-night can not be an example of so rare a disease as Hebra's lichen ruber, since in the last year he had had under treatment four examples of the same process and had seen three of Dr. Fox's. He had carefully studied the development of these cases and had observed that the primary lesion was not a papule, but an epidermic hypertrophy in the follicular openings—precisely the same as was seen in a keratosis pilaris. The epidermic concretion thus formed could be scraped out and shelled out by the finger-nail. When the hyperplasia had reached a certain point, then there arose around the follicular opening a papular elevation. Such a mode of origin was distinctly different from that described by Hebra, who stated positively that the primary lesion of his lichen ruber was a papule. Moreover, he thought that the opinions of such dermatologists as Boeck, Besnier, Unna, Hallopeau, Hebra junior, Brocq, etc., were worthy of great consideration, and each of them held that the process, of which the case presented to-night was an example, was not the lichen ruber of Hebra. Dr. Elliot thought that the disease was allied to psoriasis and to ichthyosis, being primarily, at any rate, an affection of the horny epidermis.

Mycosis Fungoides.—DR. FOX presented a case of mycosis fungoides that was before the society at its one hundred and ninety-third meeting, some two

months previously (see JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, January, 1890). The lesions had somewhat altered in character. The hardness had disappeared to some extent and the lesions were broken up into patches, with larger islands of normal skin between them. Some of the lesions were surrounded by a raised border of infiltrated tissue having a waxy appearance. Some of the lesions quite rapidly changed in size and appearance. The treatment had been Fowler's solution of arsenic internally and resorcin applications.

DR. BRONSON said that, although he did not consider the lesions characteristic, he would consider them sarcomatous.

DR. SHERWELL agreed with Dr. Fox's diagnosis of mycosis fungoides.

DR. BULKLEY said that the case closely resembled one he had recently seen in New Jersey. It had been treated by various physicians for the past two years for psoriasis and other skin diseases, but was undoubtedly sarcoma. The disease went on to ulceration, causing much destruction of tissue, and finally resulted in the patient's death.

DR. ELLIOT stated he was glad that the further development of the case had demonstrated the correctness of his diagnosis of mycosis fungoides.

DR. FOX concluded by saying that the disease very closely resembled the description given by Kaposi where the patches appeared on the flexures. The disease differed somewhat from sarcoma, as it did not involve glands or internal organs. The disease in this patient's case certainly did improve under treatment. Some of the lesions now looked as though they were taking on a mushroom-like growth.

Prurigo.—DR. FOX presented a case of prurigo in a boy eight years of age, who had had the disease for a number of years.

DR. BRONSON said that he agreed with Dr. Fox in his diagnosis of prurigo, and did not consider the presence of papules necessary in making the diagnosis. Their presence was a secondary lesion and resulted from the constant irritation from scratching, and they were often produced in the same way in eczemas. The essential thing in prurigo was the local pruritus.

DR. BULKLEY said he agreed with Dr. Bronson as to the presence of papules in prurigo. He considered the case presented by Dr. Fox as one of prurigo, and thought it occurred more frequently in this country than was generally supposed.

Double Zoster.—DR. FOX presented a case of double lumbar zoster. The patient was twenty-nine years of age, and a barber by occupation. A month ago, after a few days of pain in the region of the left hip, he noticed an eruption of "blisters." This eruption was confined to the left side until twelve days ago, when it appeared in milder form on the right side. The eruption in this case was characterized by an unusually deep infiltration of the corium and little tendency to the formation of groups of lesions. At first glance, the scattered nodules, especially upon the right side, looked more like a papulopustular syphilide or an eruption of superficial furuncles than like the typical eruption of zoster; but the history of the case, the umbilicated or crater-like appearance of the lesions, indicating their origin as vesicles, the typical patches upon the left side, and the general resemblance of the lesions upon both sides, all pointed to the diagnosis of double lumbar zoster.

Lichen Planus.—DR. SHERWELL presented a case of lichen planus in a woman aged thirty-seven years, the mother of one child. She first came to the office (sent by Dr. Rankin, of Brooklyn) January 14th, with one of the most extensive eruptions of the kind he ever saw. The itching was phenomenal. She was somewhat inclined to be constipated, but in otherwise good health. The only other abnormality of function was the fact that she commenced menstruating late—at sixteen years of age—and stopped at thirty-one, apparently naturally. He brought her for suggestions for relief from her pruritus, which is something dreadful.

Case for Diagnosis.—DR. BULKLEY presented a case for diagnosis. Patient, female, aged forty, gave following history: Entire duration of disease, one year. Never had affection of skin before in any form. No specific history could be ascertained. She was unmarried, and health had always been delicate. A year ago the disease was ushered in by sensations of heat and burning in palms of left hand, followed by appearance of small, dark-red, transparent spots along lower edge of palm, and also along base of thumb and at junction of wrist and palm. These spots turned white, and then the skin over them would exfoliate. A month later the same process began on the right hand. The disease advanced by the formation of small red spots (as above) along edge of patches. These in turn became white, and were exfoliated, leaving an itching and burning surface beneath. Later on the epidermis of both palms and palmar surfaces of fingers became greatly thickened and parchment-like, and peeled off in large flakes, leaving a red, tender, itching, burning, and sometimes moist surface beneath. From outset of disease to admission here she had been under treatment the greater part of the time. Had taken Fowler's sol., ext. casc. fed., and kali iod. The latter produced a general papular eruption. Finally she was kept a long time upon Donovan's solution. All with no benefit whatever.

Condition on Admission.—Palms of both hands and palmar surfaces of fingers were of a moderately bright-red color, denuded of their horny layer, and the exposed skin thrown into narrow furrows. Here and there a few somewhat whitish scales were seen. There was no moisture, the surfaces being glazed and tender. The disease had a well-defined border (except between the fingers, where it was irregular and shaded off) which was not made up of separate lesions, nor was it infiltrated. On flexor surface of both forearms, as high as a couple of inches above the elbow, there was a grouped and scattered eruption of a papular character, which was of two weeks' duration, and was now fading. Patient habitually constipated. It was to be noted that there had been a very rapid growth of the nails, and they had a ribbed appearance. On inner surface of the balls of both feet and great toes were lesions similar to those described upon the hands.

Genital Herpes.—Besnier recommends that when the skin is dry recourse should be had to frequent inunctions with vaseline; if, on the contrary, moisture be present, the following powder should be used: Starch, 100 parts; tannin, 5 parts; subnitrate of bismuth, 1 part. Lotions of a very dilute solution of carbolic acid should be employed. Ulcerations should be treated with astringent washes, never by cauterization.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

The Question of Impetigo Herpetiformis.—In order that I may render these letters practical and useful to the great majority of practitioners, I endeavor to avoid as much as possible purely theoretical questions ; it is necessary, nevertheless, that I should from time to time address myself directly to dermatologists, and it is for them that the first part of the present letter is more particularly intended.

In an article entitled *A Case of Impetigo Herpetiformis*, read at the annual meeting of the American Dermatological Association, September 18, 1889, and published in the December number of this Journal, page 493, Dr. Sherwell expresses himself in these terms : "I find that Dr. Brocq, in a clinical letter (September, 1888) to the editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, claims that Duhring has given up his inclusion of impetigo herpetiformis as being related in any way to the group of dermatitis herpetiformis. *If the fact is so*, I am sorry ; for I think he is right in so including, excepting always the cases that are simply frankly pyæmic or septicæmic manifestations or epiphenomena of those conditions. . . . I shall wait with some interest to know if Duhring really has, as Dr. Brocq maintains, given up his opinion as to the relative identity of impetigo herpetiformis and dermatitis herpetiformis."

I must confess that this reference of Dr. Sherwell has somewhat astonished me ; among physicians in France we are not accustomed to cast doubt upon a fact which one of us categorically affirms. Such a suspicion would be quite gratuitous, but I do not insist upon this point. When I wrote to the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES that Professor Duhring had stated to me, in a conversation which we had together at the Hôpital St.-Louis, that he had modified his views in relation to the impetigo herpetiformis of Hebra, I was absolutely sure of what I stated. So true was this that, a month after the writing of the correspondence to which I make allusion, Professor Duhring sent me, to be read before the Congress of Dermatology and Syphilography held in Paris in August, 1889, a letter in which he acknowledged that formerly, in recognizing impetigo herpetiformis only from the works of Hebra, of Geber, and of Neumann, he had erroneously concluded that this affection should enter into his category of impetigo herpetiformis ; but that, since the publication of the last work of Kaposi upon this subject, he had completely changed his opinion, and believed that I was right in declaring that the impetigo herpetiformis of the Vienna school was altogether different from his dermatitis herpetiformis.

This letter of Professor Duhring has been seen by Messrs. Kaposi, Besnier, Vidal, and others. It was read by myself at the séance of the congress when the discussion on Bullous Eruptions took place ; it served as the basis of the argument of Professor Kaposi ; it constitutes, therefore, a document authentic, certain, undoubted.

For my part, I can not too strongly felicitate Professor Duhring upon having written it. In doing so he has shown his scientific honesty and his high position as a clinician and a dermatologist. I have thoroughly discussed this question in my exhaustive work on dermatitis herpetiformis, and it is not fitting to here return to it, except to say that the symptomatology, the course, the evolution, the termination of impetigo herpetiformis, such as it was described in the last article of Kaposi, are altogether special, and constitute an entirely distinct and independent affection. In any case, it is absolutely impossible to identify dermatitis herpetiformis with herpes gestationis. For further details upon this subject I may refer to my own work.

The case published by Dr. Sherwell under the name of impetigo herpetiformis is not an impetigo herpetiformis in the sense used by Kaposi. From this comes the entire error of this observer. It is quite easy to comprehend how he can not have an exact idea of this malady when he cites as an example of this affection a case which has nothing in common with it. I would refer him, should he wish to study anew this delicate question, to the original memoir of Kaposi and to my own work, which appeared in the *Annales de dermatologie et de syphiligraphie*, 1888, and in the *Monatshefte für praktische Dermatologie*, 1888 and 1889.

Treatment of Tinea Tonsurans.—*Treatment of Dr. Quinquaud.*—During the past year Dr. Quinquaud has employed in the Hôpital St.-Louis, of Paris, a new mode of treatment of tinea tonsurans without epilation, and which has given him most satisfactory results. Dr. Quinquaud is charged with the superintendence of the École des teigneux, which has been established at this hospital. This explains how he has been able to subject these little patients to such a vigorous treatment, for they are seen every day by the attendants charged with their care.

As soon as the children enter the school their heads are carefully washed with soap, then with a solution of sublimate (1 to 1,000); the hair is cut very short with scissors or the scalp is shaved, especial care being taken to thoroughly cleanse the hairy scalp with a parasiticidal solution immediately after the shaving.

This being done, the grayish trichophytic patches are energetically scraped with a sort of curette of a special form designed by Dr. Quinquaud for this purpose. The derma is thus exposed, the superficial scales are mechanically removed, and with them the broken and diseased hairs and a certain quantity of trichophytic vegetations of the epidermis. In very timid or sensitive children the patches may be anaesthetized before practicing the grattage; for this purpose Dr. Quinquaud uses the chloride of methyl. When the scraping is completed, the entire head, more particularly the affected surfaces, are bathed with the following solution:

R Hydrarg. biiodidi. 0.15 ;
Hydrarg. bichloridi. 1.00.

Mix in a mortar and add to dissolve them:

Alcoholis, 90° 40.00 ;
Aq. destillat. 250.00.

There are then applied over the diseased patches rolls of plaster prepared as follows:

R Hydrarg. biiodidi.....	0.15 ;
Hydrarg. bichloridi.....	1.00 ;
Emplast. simpl.	250.00.

Or in place of this a plaster prepared with hydrate of bismuth.

The head of the child is then enveloped in a towel or cloth ; the dressing is thus maintained for forty-eight hours. At the end of this time the plaster is removed, the head soaped, and frictions with the above-mentioned lotion employed. The plasters are then renewed, and the same procedure is repeated every two days until a cure is effected. If this is not accomplished, epilation is practiced, or one or two more scrapings are employed.

This method does not ordinarily occasion inflammatory phenomena ; if by chance a few pustules should develop, it is only necessary to decrease the strength of the lotion and the plaster to cause them to disappear.

Dr. Quinquaud has in this manner effected numerous prompt and complete cures, but he particularly insists upon the fact that the treatment should be vigorous and executed with the greatest regularity, otherwise no definite result will be obtained.

Treatment of Dr. Besnier.—This is the latest treatment recommended by Dr. Besnier, of the Hôpital St.-Louis :

1. Cut all the hair as short as possible, and keep it cut close during the entire treatment. Do not on any account shave it, as the razor favors auto-inoculations.

2. Practice with the greatest care a circle of epilation six to eight millimetres in width around all the diseased patches, and in particular around the original patch.

3. Eliminate by racleage with the curette the broken hairs and all detritus which cover the diseased patches, but do this with moderation, without provoking a sanguineous effusion. It is quite easy to thus completely clear the affected surfaces by taking the precaution to smear them with any greasy substance—oil, lard, vaseline, etc.

4. Accordingly as the hairy scalp is irritated or not, wash it daily with ordinary soap, with soap medicated with tar, boric or salicylic acid, or sulphur, etc., or simply with the yellow of an egg and bran-water.

5. Then cover the trichophytic patches, especially when they have attained a certain size, with rolls of fine Vigo plaster.

Treatment recommended by myself.—The method of Dr. Besnier appears to me most excellent ; it very closely approaches that of Dr. Quinquaud. It differs from the latter essentially in the methodic and regular employment of epilation. There is in this procedure a condition of security and of facility of surveillance which at present I can not renounce.

Dr. Besnier does not believe in the efficacy of parasiticidic agents ; nevertheless, he is the first to recommend the employment of these substances if one has a theoretic confidence in their action.

Until their inutility has been superabundantly proved, I think that the practitioner would be wrong in neglecting this chance of success ; still, I am in one respect of the same opinion as Dr. Besnier, who discourages the employment of ointments, for numbers of children support badly applications of greasy substances.

I adopt, then, the complete treatment formulated by Dr. Besnier ; but I add to it a daily lotion with the mixture of biniodide and bichloride of mercury recommended by Dr. Quinquaud. After washing the head, there should be applied the emplastrum de Vigo, or the plaster of biniodide and bichloride of mercury, after the method of Dr. Quinquaud.

It is well understood that when the affection seems to be cured it is necessary, before delivering to the patient a certificate of cure, to submit him to a careful observation extending over several weeks ; otherwise there are grave chances of one being deceived.

Treatment of Scabies with Petroleum.—Dr. Bourgeois gives in the *Revue générale de chimie et de thérapeutique* the following details of the treatment of scabies with petroleum. He believes that this substance is one of the most efficacious antispories, the cheapest, and the easiest of control. All the patients treated by this method have been completely cured within three days at the most.

The first day he orders, just before the patient retires, inunctions of petroleum over the whole surface of the body, except the head, rubbing more particularly the surfaces most affected. The shirt is then resumed and the patient put to bed. The next morning the greasy substance is washed off with warm water and white soap. The linen is changed, and the patient goes about his usual occupation. At night, before retiring, a new application of petroleum, as before, and the following morning the same procedure to remove the oil. Ordinarily, after the second day the itching is completely relieved ; but, as a measure of security, it is well to make a third application, after which the patient may be considered completely cured.

The author claims that this treatment is entirely innocuous and free from pain. It would seem to be most efficacious, since in fourteen cases there were fourteen complete cures, without the necessity of disinfecting the garments. I confess that as regards this last point I am somewhat distrustful ; since the petroleum is only employed when the patient is undressed, the clothing would not, therefore, be impregnated with the antiparasitic. It is impossible that the petroleum should destroy the larvæ or insects found in the folds of the clothing, etc. We know how very frequent are relapses of scabies when there is not a complete disinfection of the garments. Moreover, if the patients are not prudent and careful, the treatment presents great possibilities of failure, especially when the inunctions are made at night by an artificial light. However this may be, the petroleum treatment should be utilized in cases where other active therapeutic agents—such as sulphur, naphthol, styrax, balsam of Peru, etc.—can not be employed.

Acne Decalvante.—I would again call the attention of American dermatologists to an entire series of researches recently undertaken in France with the object of elucidating the complex group of folliculites and sycosis. I have already referred to these investigations in a previous letter, and have given a succinct *résumé* of the labors of Dr. Quinquaud and myself. Recently M. Robert, one of the pupils of Dr. Lailler, has described, from notes furnished by the venerated dean of the Hôpital St.-Louis, an affection of the hairy scalp to which he has given the name of *acne decalvante*, and which was long since recognized by Dr. Lailler.

The acneic lesions develop at first upon the hairy scalp with their habitual characters ; they are confluent or disseminate, situated toward the front, behind the ears, and especially upon the summit of the head. Each lesion has a duration of about fifteen days. At first red and acuminate, it then becomes pustular and finally disappears. At the same time an acne is frequently observed upon other parts of the body—the back, for example. This first purely acneic stage of the eruption may continue for a more or less prolonged period—three or four months on the average. To this succeeds a secondary stage, in which true acne lesions are only exceptionally observed, and still the hairs continue to fall more or less abundantly, so that there soon occur veritable alopecic patches, attended sometimes with itching, sometimes with excoriations, with redness or simply a slight furfuraceous desquamation. The contours of the alopecic patches (there is always a principal one) are irregular and jagged ; the hairy scalp at their *niveau* is smooth, shining, and apparently atrophied.

Dr. Lailler is not clear as to what constitutes the best treatment for this affection. He thinks it necessary to proscribe all irritant applications, since these preparations aggravate the acneic crops. He is certain that in one case the fall of the hair ceased upon the employment of an ointment of turpeth mineral.

Treatment of Folliculites.—I have no intention of giving here an exposition of the treatment of folliculites, the more especially since the treatment varies according to the complex causes of these affections. I only wish to call attention to a topical application already employed by Loewenberg for furuncles of the ear, and which appears to render a real service in certain cases of grouped folliculitis (non-trichophytic sycosis, *acné keloïdienne* of the nucha, etc.).

It is absolute alcohol supersaturated with boric acid ; when there is much inflammation, the diseased parts may be bathed twice daily with this lotion, or pour a few drops upon a cataplasm of potato-starch, which may be applied over the affected surfaces. If, on the contrary, there is but slight inflammation and a topical application is well supported, a little absorbent cotton may be moistened with the lotion and applied. This is covered with a gutta-percha plaster and examined from time to time for fear of exciting too much irritation.

Local Antiseptics in the Treatment of Syphilis.—Dr. Hallopeau has recently directed attention to a question already much discussed, but which, considering its great practical importance, can not be too strongly insisted upon. I refer to the value of the local treatment of syphilitic accidents.

Dr. Hallopeau regards each manifestation of syphilis as a center of multiplication of the virus—as a source of reinfection—which it is necessary to suppress. If we wish to exercise an energetic and profound action upon these accidents, we should have recourse to the acid nitrate of mercury, which is such a heroic remedy in syphilis of the mucous membranes, but which may be rendered much less painful by the preliminary application of cocaine ; or we may employ the sublimate in powder, the caustic action of which is most vigorous and should be carefully watched. Dr. Hallopeau has used it as an abortive treatment for the indurated chancre. Mild solutions of the

sublimate (1 to 500, to 1,000, 2,000, or 3,000) may be applied by means of pledgets of cotton to the affected parts and then covered with gutta-percha plaster, so as to constitute a permanent bath ; these are most useful in all syphilitic ulcerations. Baths of the sublimate are employed where the lesions are extensive ; ointments and plasters should be reserved for circumscribed manifestations.

Preparations which contain iodine as the active principle are oftentimes quite as efficacious as mercurial preparations in the local treatment of syphilides. Among them Dr. Hallopeau places iodoform in the front rank, the so-called specific action of which upon syphilitic ulcerations has long been recognized.

Dr. Hallopeau insists that in the presence of tertiary, or even secondary, syphilitic manifestations we should never content ourselves with the administration of internal treatment alone ; an active topical medication very materially abridges the duration of the treatment. L. BROcq.

PARIS, *January, 1890.*

SYPHILIS IN JAPAN.

Editor of Journal of Cutaneous and Genito-urinary Diseases.

DEAR SIR : The article in the February number of your JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, entitled A Contribution to the History of Syphilis (Dr. B. Scheube, Leipsic, Virchow's Archiv), errs in attributing to Chinese works the knowledge of medicine possessed by Japanese physicians "up to the most recent time and to a great extent to-day," also in stating that Japanese medical works are "chiefly excerpts and compositions from the old Chinese literature."

Originally Japanese medical art *did* derive from the Chinese, not including the separate system as practiced by the Ainos, or aboriginal Indians of Japan.

Japanese medical knowledge later on was mainly of Holland and Portuguese derivation, following the invasions by these nationalities, I think, in the fourteenth and fifteenth centuries.

Up to the time even of Perry's conquest, by treaty, and the consequent general enlightenment of the country, the text-books of Japan were not alone Chinese translations, but Holland and Portuguese as well.

Afterward English, French, and German translations appeared, and more or less completely crowded out the older Chinese and Holland and Portuguese system, many of the Holland and Portuguese text-book translations being still retained, however, as favorites. Very little of the original Chinese influence is to-day remaining in the Japanese system of practice.

During my sojourn in Japan in 1874 and 1875 there was but little Chinese practice followed by physicians of any enlightenment, and mainly by those far in the interior of the island.

The article referred to errs also in its statement that the Japanese derive their knowledge of the use of mercury in the treatment of syphilis from Europeans. This is not so, their knowledge of mercury coming from the

original Chinese, and being known to them before the Holland and Portuguese advent even.

Syphilis in Japan is as ably understood and as clearly defined ætiologically and symptomatically as it is with us.

Syphilis and leprosy—their two scourges—are both “but old stories” to the Japanese medical men, and the abler of them fully appreciate their respective contagiousness and hereditary peculiarity, and Japanese medicine had learned *their* lessons long before our European system had learned them.

Both diseases (syphilis and leprosy) in Japan to-day are under medical supervision and control, prostitution being licensed, and *Lock* hospital systems of remedy governing them. Yours very sincerely,

ALBERT S. ASHMEAD, M. D.,

Late Foreign Medical Director, Tokio-fu Hospital, Tokio, Japan.

4 KING STREET, *February 1, 1890.*

ETYMOLOGY OF A FAMILIAR WORD.

To the Editors of the Journal of Cutaneous and Genito-urinary Diseases :

In one of your issues last summer I noticed a communication the object of which was to give the writer's idea of the derivation of the vulgar name for the testicles. He made it identical with “bullocks,” which, as every one knew already, is the diminutive of “bull.” This involves an error in orthography, and is also entirely inadequate. The word as in common use is spelled correctly with “o,” not “u.” The true descent of the word is from “boll,” which means a seed-vessel; whence, naturally enough, “bollocks,” little seed-vessels. It is Saxon, pure and undefiled, and not a vulgar play upon words; and, moreover, it is strictly and scientifically correct. The matter is not one of great importance, of course, but it is probably as well that it should be set right.

BENJAMIN LEE.

1532 PINE STREET, PHILADELPHIA. *January 15, 1890.*

Selections.

The Treatment of Catarrh of the Bladder.

DR. GRÜNFELD (*Centralblatt für die gesammte Therapie*, December, 1889), treating of the therapy of bladder catarrh, says that the inflammatory diseases of the bladder in general are, as a rule, spoken of under the designations “catarrh of the bladder” and “inflammation of the bladder,” and are regarded by most physicians not as two distinctive disease processes, but as gradual transition stages of one affection. When the mucous membrane is alone implicated we speak of catarrh (*cystitis mucosa*), while in cystitis proper all the layers of the bladder participate in the inflammatory condition.

The term pericystitis may be applied to an inflammation affecting the tis-

sues about the organ, and especially the peritoneal covering. We speak of idiopathic and symptomatic catarrhs, and of an acute and chronic variety. The latter has an especial advantage since the pathological distinctions of the two varieties are by this manner of division best expressed. As regards the causation of bladder catarrh, local affections play an important rôle. In most cases it is the result of direct transmission from a neighboring organ, or one in direct connection with the bladder. Gonorrhœa is one of the most frequent sources of bladder catarrh, and that disease of the prostate, such as carcinoma, for example, can give rise to cystitis is self-evident. The introduction of instruments may work injury in a traumatic or an infectious manner. It is not necessary that the infectious material should be upon the instrument, but may be carried along with it from the urethra. The same effect may be produced by pus gaining access to the bladder from the kidneys, ureters, or from an abscess opening into the bladder. Foreign bodies accidentally finding their way into the organ, or forming within it, as calculi, and, in a certain sense, new growths, equally give rise to catarrh. The misuse of diuretics, balsamics, cantharides, etc., must be mentioned, but more important is the condition of retention of urine in the bladder as a cause of cystitis. Typhus, cholera, variola, and other febrile diseases often have bladder catarrh as a complication.

In *catarrhus vesicæ* we have an increased secretion of mucus, while in *cystitis* an increased production of pus is to be found. The former is characterized by an increased injection of the vessels of the mucous membrane, or simple hyperæmia. This can be demonstrated by the cystoscope, which shows the mucous membrane to be of a light-red color in place of the normal pale-yellow. The vessels are seen to be thickened and visible on all sides—only the fine ramifications escape detection—especially in markedly hyperæmic spots. At times the posterior wall or the fundus has been found by the author quite unchanged.

In *acute cystitis* there is swelling and redness of the mucous surface, increased injection of the vessels, smooth or uneven surface, and implication of the submucous cellular tissue. The cystoscope shows at times dark-red, and even bluish-red, regions, and often ecchymotic points, spots, or plaques. Acute cystitis may lead to other anatomical changes, and ulceration, gangrene, croup, diphtheria, etc., may be produced.

In *chronic cystitis* there is thickening of the mucous membrane, the surface is uneven, dark-red, bluish-red, and even dark-gray. The cystoscope shows some regions dusky-red, swollen, and uneven; others, pale or pale-yellow. The vessels are in places not at all visible, at times indistinctly defined and interrupted. Ecchymoses and ulcerations are to be seen, and pus floats in the urine, or lies at the base of the bladder in thick masses.

Thus it is evident that not only the ætiology, but the variety of the disease at hand, must be considered in choosing the course of treatment. In simple bladder catarrh, treatment has to do only with the general condition of the patient, for the local affection will disappear so soon as the condition which has caused it is rectified. The author recommends simply a lukewarm bath once, or possibly twice, daily; attention to the bowels, and dilution of the urine: suitable diet, and some appropriate mineral water (Giess-

hübl, Krondorf Salvator, Agnesquelle, Bilin, etc.). Local treatment is only required where a slight stricture or enlarged prostate is formed. In severe acute cystitis leeches to the perinaeum, about the anus, and in the bladder region are advised. Cold applications, if well borne. Opiates to quiet the severe pain. The author has had good results from cocaine suppositories (0·20 in five doses). Clysters of lukewarm camomile tea have also given a good calming effect. Sitz baths of fifteen to twenty minutes' duration, and hot applications over the bladder, often give much relief. In hæmaturia, some hæmostatic must be given at the same time, and the one most highly recommended is the ferr. sesqui. sol. in daily doses of about one gramme. If pain be very severe, the prostate must be examined for possible abscess as a cause. Where the pain and strangury can not be allayed, surgical interference (drainage of the bladder) becomes necessary.

After the most acute symptoms have subsided, if the pus has not steadily decreased, local treatment must be begun. Washing out the bladder with a one-per-cent. lukewarm boric-acid solution, or a creolin solution (1 to 2,000 or 1 to 1,000), or a rose-red solution of hypermanganate of potassium, succeeds well, and prevents an acute cystitis from becoming chronic. A soft catheter must be used, and the stream thrown in gently.

In treating chronic cystitis, the physician must know whether he has before him a hypertrophied prostate, a paresis of the bladder, etc. Treatment is here directly local and much more important than internal medication, though good results are reported from benzoic acid, salicylic acid, salol, nitrite of amyl, balsams, and oils—among them oils of sandal and eucalyptus. Especially important is it to remove the urine, whose chemical composition surely has an unfavorable influence on the mucous membrane. Disinfection of the bladder must be sought for, and finally local therapy has the important duty of bringing back the mucous membranes to normal by appropriate astringent remedies. To remove the urine, and introduce astringents, a soft catheter must be used and introduced daily, three or four times a day, or only every second day, according to circumstances. In certain severe cases a permanent catheter, or continuous irrigation, is necessary. In the first rank of disinfectants for washing out the bladder, and one best borne by the patient, is a one-to-two-per-cent. boric-acid solution. Permanganate of potash in weak solution (1 to 1,000 or 1 to 2,000), resorcin half to one per cent., carbolic or salicylic one quarter to one half per cent., chloride of zinc one per cent., sublimate 1 to 10,000, five or ten drops of nitrite of amyl in 500 grammes of water—may all be followed by good results. The effect is increased if a little of the solution is left in the bladder, and passed or drawn off later.

The astringents mostly employed are sulphocarbolate of zinc and crude alum in half-to-one-per-cent. solution, sulphate of thallium one to one and a half per cent., chloride of zinc one per cent., acetate of lead one to two per cent. In many cases, instillation of a quarter to a half per cent. nitrate-of-silver solution by means of Ultzmann's or Guyon's instrument into the bladder is undertaken. By very careful management a good result is to be anticipated, but great care must necessarily be employed.

After careful cystoscopic examination to fix the size and location of the diseased areas, the author has in a series of cases in women painted the mu-

cous membrane, through his open endoscope, with a five-per-cent. silver solution or the tincture of iodine. In cases of long standing, especially, the results were satisfactory.

In chronic catarrh of the bladder the physician must take cognizance of the condition of neighboring organs, and especially of the prostate.

Is Lichen Syphiliticus the Product of a Mixed Infection of Syphilis and Tuberculosis?

THE author of a paper with the above interrogative title, Dr. Michelson (Virchow's Archiv, No. 3, 1889), reports three instances in the same family—two daughters and the mother—all affected within a comparatively short space of time with a fine, papular lichenoid eruption, which, in the first case, was identical with lichen ruber planus. The exanthem in this girl had appeared at the age of one year and ten months, three weeks after vaccination, and disappeared almost completely after a fortnight's use of Unna's carbol-subliminate salve; but a new eruption made its appearance a few weeks later. The three-and-a-half-year-old sister of this patient became similarly affected about three months later, and presented upon the buttocks and extremities the same small red papules of pin-head size in groups of, at most, ten separate lesions, and bore a close resemblance to lichen scrofulosorum, but there were present at the same time typical condylomata lata, erosion at the corner of the mouth, and polyadenitis. Within a month's time the exanthem had disappeared under calomel, in doses of three centigrammes twice daily. The mother, who used the same table utensils as the daughter first affected, began to complain of pain and difficulty in swallowing, and a swelling occurred beneath the left jaw, an eruption of small papules followed, and typical mucous patches showed themselves, which all disappeared under the tannate of mercury, followed by iodide of potassium. Thus we see three members of a family in quick succession showing a lichenoid exanthem, together with clear symptoms of secondary syphilis. Lichen syphiliticus is one of the rarer manifestations of lues, showing itself in the acquired disease during the secondary period, and it is all the more remarkable that three individuals in a family should present the same symptoms. Histological examination of lesions in two cases showed a proliferation of epitheloid and lymphatic cells in the papillary layer and the upper part of the stratum reticulatum of the corium. Some giant cells (Langhans) with marginal nuclei were found in almost all the cell masses of the corium, corresponding to those of tubercle, but no tubercle bacilli were to be found, and during two years of observation no tubercular affection showed itself. The question of mixed infection is left unsolved, but a mixed form of tuberculosis and syphilis is suggested for these cases of lichen-like syphilitic eruptions.

Eruption from Tannin.—Dr. Lange, of Copenhagen, reports a generalized eruption of an urticarial character from the local application of a solution of tannin, 1 to 15, to the mucous membrane of the pharynx. Twice before the patient had suffered from the same symptoms after being treated with tannin, once in the form of powder and once in that of solution.—*Lancet*, January 11, 1890.

Book Reviews.

The Classification, Correct Dietary, and Treatment of Diseases of the Skin. By HENRY S. PURDON, M. D., L. R. C. P., Honorary Physician to the Belfast Skin Hospital, etc. Belfast: William Mullan & Son, 1889.

THIS little manual, which, according to the author, is intended to be only of the nature of a note-book, may be regarded as an exponent of the treatment of diseases of the skin as practiced in the Belfast Skin Hospital. The system of classification, it is claimed, "exhibits at a glance the nature of each complaint classified according to its nature," doing away with "Willan's old-fashioned classification, and also Hebra's modern one." While the element of cause is generally recognized as the correct basis of a scientific and perfect classification, it is questionable whether the present status of our knowledge of dermatology admits of the construction of an aetiological classification. The causes of many skin diseases are quite complex, and of others altogether indeterminate.

In this little book the symptomatology of the different diseases is of the briefest possible description and quite subordinate to considerations of cause and treatment. It concludes with the special cutaneous remedies employed by the author, a few selected formulæ used at the Skin Hospital of Belfast, and the rules of diet to be observed by patients.

A Handbook of Dermatology for the Use of Students. By A. H. OHMANN-DUMESNIL, A. M., M. D., Professor of Dermatology, St. Louis College of Physicians and Surgeons, etc. Illustrated. St. Louis: St. Louis Medical and Surgical Journal Publishing Company.

IN this little work Dr. Dumesnil has presented an outline of our knowledge of diseases of the skin with clearness, comparative completeness, and brevity. The necessary limitations of a work of this kind render it impossible to devote much attention to pathological details or to points of differential diagnosis.

The book is illustrated by thirty-four figures, and will no doubt prove an admirable guide and stimulus to students in their reading.

Du traitement abortif de l'herpes par les applications d'alcool pur, ou de solutions alcooliques (d'après la méthode de M. le Prof. Leloir). Par FRANÇOIS-XAVIER DUPAS, docteur en médecine. Thèse pour le doctorat en médecine. Lille, 1889.

THIS thesis, which has for its object the study of the abortive treatment of herpes, and particularly that employed by Prof. Leloir, is of great practical interest. After a description of the symptomatology and pathological anatomy of herpes, there follows a historical *résumé* of the various palliative and abortive measures which have been employed from time to time. The generally unsatisfactory results from the employment of emollient and protective applications, collodions, vesicatories, solutions of nitrate of silver, perchloride

of iron, etc., are insisted upon, and the incontestable superiority of the alcohol treatment maintained. It is claimed that, if this treatment be energetically employed in the erythematous stage or the beginning of the vesicular stage, an abortion of the herpetic eruption is obtained in a few hours; if not employed before vesiculation takes place, the abortion is effected in from several hours to one or two days; if delayed until the stage of vesiculopustulation, the eruption is notably relieved, the pustules dry up rapidly, the congestive fluxion of the skin and subjacent tissues disappears, and successive crops of vesicles are prevented. It is further claimed that this treatment exercises a remarkable salutary influence upon the element of pain as well as the eruption. The observation of twelve cases is detailed at some length in support of the favorable influence of this method of treatment.

Alcohol (ninety per cent.) is ordinarily employed, and it is sometimes found advantageous to combine with it a slight quantity of phenic acid, thymol, menthol, resorcin, extract of cannabis indica, or hydrochlorate of cocaine. Compresses, dipped in the solution, are applied and covered with a thin sheet of gutta-percha, adhesive plaster, or maintained in position by a layer of traumaticin or medicated gelatin. The dressing may be removed several times a day.

The Male Urethra, its Diseases and Reflexes. By FESSENDEN N. OTIS, M. D., Clinical Professor of Genito-urinary Diseases in the College of Physicians and Surgeons, New York; Surgeon to Charity Hospital, etc. George S. Davis, Detroit, Mich.

THE views of our distinguished *confrère* upon this subject have been so widely promulgated and are so well known that extended reference to the subject-matter of this little volume would be superfluous. After a description of the anatomy of the urethra, its variations and deformities, he considers the various reflex troubles due to urethral stricture.

In the author's treatment of recent urethral discharges he has adopted the Curtis plan of hot-water retrojections in combination with Halsted's method of irrigation with weak solutions of bichloride of mercury. The work concludes with the treatment of gleet and incipient stricture by local applications by means of Uitzmann's syringe. In gleet, complicated with narrowing of the urethral canal or a small meatus, the author strongly insists upon the divisions of these contractions as the condition of cure.

Contribution à l'étude de l'étiologie de l'impétigo. Par JACQUES-LUCIEN BOUSQUET. Thèse pour le doctorat en médecine. Bordeaux, 1889.

AFTER a glance at the views which have been generally held as to the nature and cause of impetigo, the author details the results of numerous examinations of impetigo pustules in order to determine the nature of the pathogenetic agent. A chapter is devoted to the study of the manner in which this agent penetrates into the organism and causes the disorders which are revealed in the diverse symptoms of the eruption. A general *résumé* of the results of his work is given in the following conclusions:

1. The parasites encountered in the pustules of impetigo are always staphylococci, identical with those found in pus.

2. These staphylococci are the cause of impetigo. By their penetration in the cells of the mucous layer of Malpighii they cause the eruption of psyraceous pustules.

3. Impetigo is a contagious affection.

4. Impetigo is a benign affection in which any treatment succeeds, but, nevertheless, one ought to give preference to antiseptics in the treatment, and especially to mercurial solutions and ointments which will destroy the staphylococcus, the cause of the affection. As prophylactic measures it is necessary to exercise a vigorous surveillance in schools and separate children affected with impetiginous lesions, and not permit them to re-enter until after complete cure. School-rooms should be well ventilated, bodily cleanliness insisted upon, and all pruriginous affections, especially phthiriasis, should be treated.

Items.

Sozoiodol in Burns.—Dr. E. Ostermeyer recommends sozoiodol in burns as a substitute for iodoform; he claims that the consequences of iodoform poisoning are avoided. It quiets the pain like iodoform, and, unlike iodoform, prevents suppuration; besides this, it is not dangerous and completely odorless. In such cases the vesicles are punctured and the fluid contents are removed by sterilized cotton or charpie balls dipped in starch; then a mixture of sozoiodol (ten per cent.) and starch is strewn on, and a bandage applied. Its favorable action may be observed twenty-four hours after its application. The process of healing takes place in an astonishing short time, without a trace of suppuration, and the patient observes no pain. There is no danger of poisoning, even when large surfaces are exposed. Sozoiodol acts not only well upon burns from flames and hot vapors, but also those terrible burns from corrosive fluids such as happen in factories. It has been observed that persons burned by caustic potash and bromoacetic acid, where this remedy was applied, suffered from but little pain, and the almost always unavoidable scars did not appear.—*Deut. med. Wochenschrift*, October 10, 1889.

Anti-parasitic Ointment.—The following ointment is useful both in skin affections dependent upon pediculi as well as upon the vegetable parasites:

R Salicylic acid.....	3·0
Borax.....	1·0
Balsam of Peru.....	2·0
Vaseline.....	20·0
Ether, essence of anis.....	gtt. v
Essence of bergamot.....	gtt. xx. M.

Death following the Injection of Cocaine into the Urethra.—Before performing an internal urethrotomy, the author, M. Simes, injected one gramme of a five-per-cent. cocaine solution into the urethra. The patient, aged twenty-nine years, was, independent of his local trouble, in good health. Immediately following the injection, contraction of the muscles of the face took place, then dilatation of the pupils, arrest of respiration, and epileptiform convulsions. The convulsive phenomena increased in severity, the respiratory movements became more and more feeble, the cyanosis intense, and at the end of twenty minutes the patient was dead. At the autopsy the lungs were much congested

but normal, the left ventricle contracted. Post-mortem clots were found in the right heart.—*Gaz. degli ospitali*, Oct., 1889. *Lyon médical*, 20 Octobre, 1889.

The Ætiology of Purpura Hæmorrhagica.—L. Letzerich, in a *brochure* published by Vogel, at Leipsic, 1889, details some experiments which prove what was suspected by others—that morbus maculosus is caused by a specific bacillus.

The bacilli were found in the hæmorrhagic spots and in the liver; in the latter locality they were especially numerous.

They lodge in the divisions of the capillary vessels, and there exercise a chemical influence on the albumin of the blood, changing it into a gelatinous substance which produces disturbances of the circulation leading to extravasation of blood. The author succeeded in obtaining pure cultivations of the bacillus, and produced a hæmorrhagic purpura in rabbits by experimental inoculations.

The Treatment of Chronic Gonorrhœa.—Bender ("Archiv f. Dermat. u. Syph.," 1889, Heft 3) recommends the following ointment:

R Argent. nit	0.5
Solv. in minim. quantitat. aqu. dest.	
M. c. lanolin puriss. anhydr	35.0
Ut ol. oliv. puriss.	15.0
M. Ft. ungt.	

To be applied to Caspar's cannulated sound and introduced into the urethra—at first three times a week; later, twice a week. In anterior urethritis, introduce the sound a few centimetres beyond the bulb; in posterior urethritis, as far as the bladder.—*Monatshefte f. prak. Dermat.*, Band ix, No. 7.

A Case of Mixed Infections (Dermatitis Tuberculosa Acuta).—Heller, of Kiel (62. *Versammlung deutscher Naturforscher zu Heidelberg*, 1889), described a peculiar skin affection in a child four months of age, the subject of general miliary tuberculosis originating from caseous glands adherent to the right innominate vein.

The eruption on the skin consisted of fine red points and papules, vesicles and bullæ, the latter containing partly clear, partly cloudy and bloody contents; in the neighborhood of this eruption, from the bursting of the vesicles, small ulcerations with a yellowish base and a central gangrenous spot extending somewhat deeply. The vesicles contained tubercle bacilli.

Skin sections taken from different places showed small round-cell infiltration with imperfect staining of the cell nuclei in the central portion of the papule.

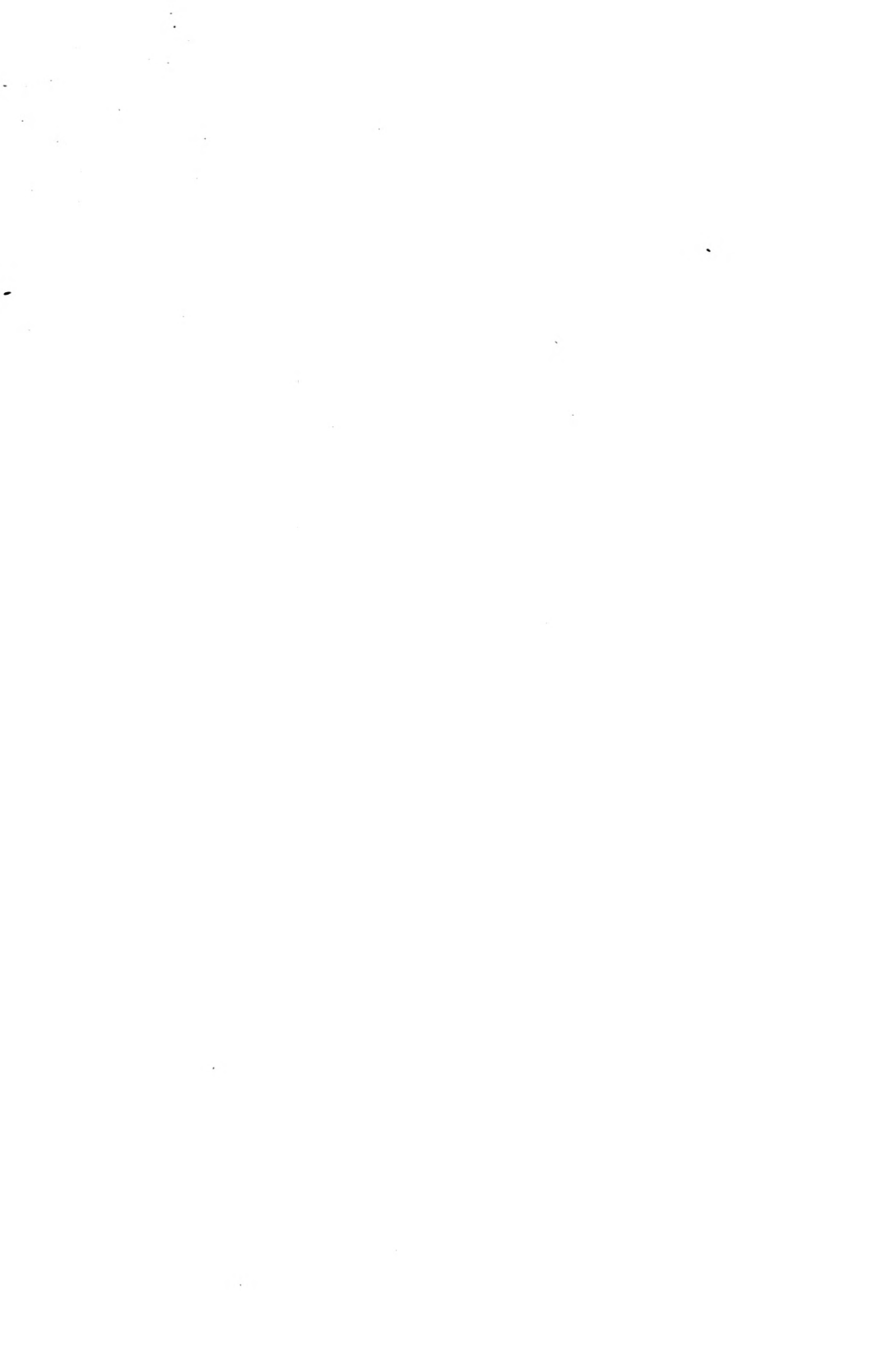
A few tubercle bacilli were found in the sections, together with numerous small micrococci: the cocci were found not only in the papules, but also, much less abundantly, however, in the healthy skin and in the division of a small artery.

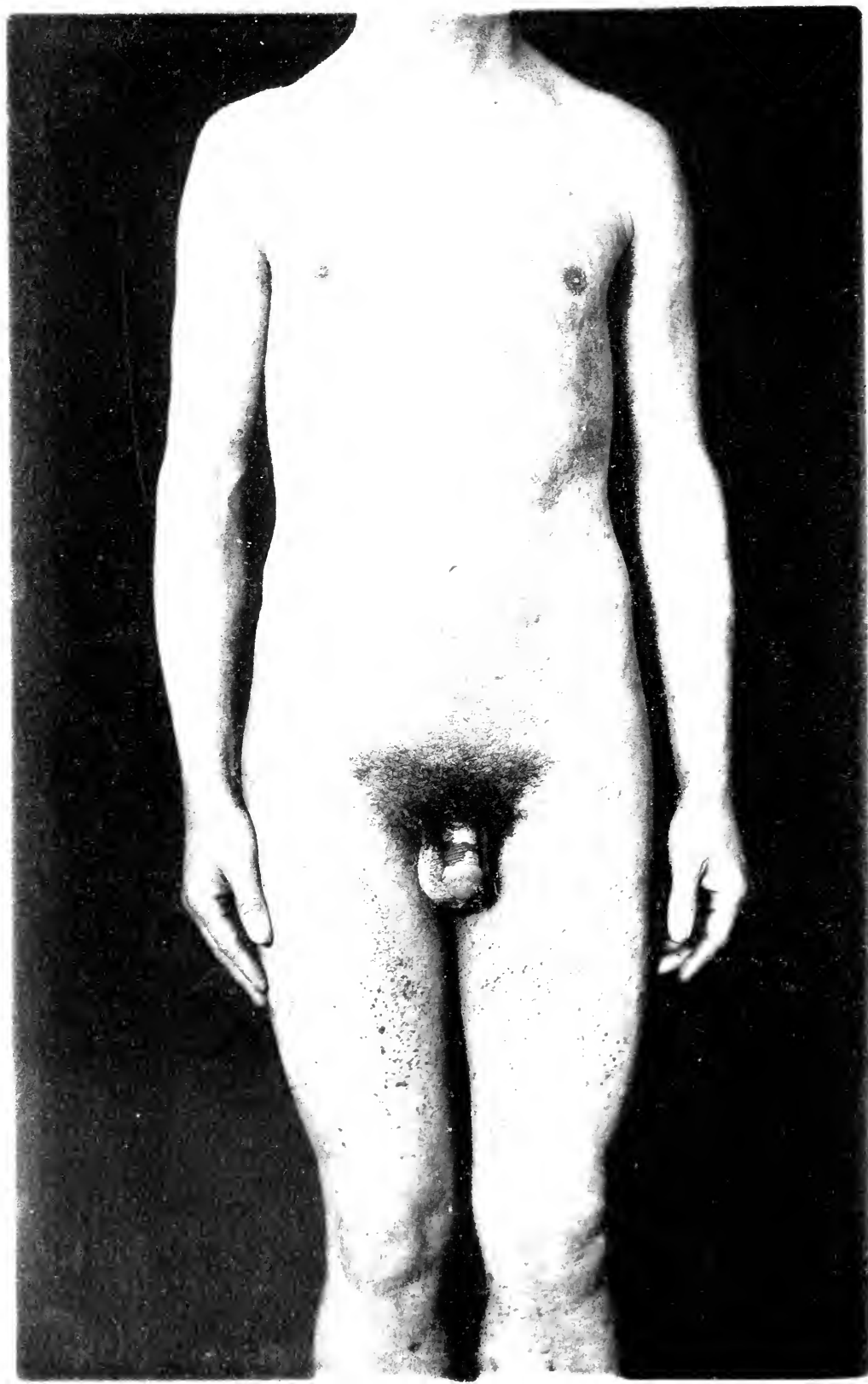
The author believed that, as in other parts of the body, the tubercle bacilli which had gained entrance into the circulation had produced a secondary tuberculosis of the skin; that it would, however, have remained unobserved had not the advent of the micrococci caused development of the eruption.

Unguentum Lanolini.—To prevent the tenaciousness of lanolin, H. Helbing recommends the following mixture:

Lanolin anhydr.	65.0
Paraffin liquid	30.0
Ceresin	5.0

After melting these together, thirty parts of distilled water are kneaded in. This lanolin ointment is excellent as a base for aqueous fluids, keeps well, and looks well. Unguent. paraffini does not take up watery fluids.—*Pharm. Ztg.*, 70, 1889.





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Original Communications.

PEMPHIGUS PRURIGINOSUS.

By HENRY G. PIFFARD, M.D.,
New York.

FROM time to time we meet with ill-understood, anomalous cases of vesicular disease which it is impossible to name or even classify in a satisfactory manner. Among these will be found a few instances of an affection which corresponds to the descriptions given of a disease to which systematic writers have applied the title which heads this article.

Willan (1808) says: "An eruption resembling the pompholyx diutinus appears in some cases of prurigo formicans and senilis, and greatly aggravates the symptoms of those complaints."

Bateman (1817) gives a plate which "represents an appearance of the pompholyx which is sometimes connected with the prurigo formicans."

Cazenave (1838) says: "Pemphigus may coexist with a number of other affections; those which accompany it most frequently are herpes and prurigo. In this last complication (*pompholyx pruriginosus* of Willan) the patient experiences severe itching."

Tilbury Fox (1873) says: "There is a form of disease in which the characters of prurigo and pemphigus are intermingled to which the term *pemphigus pruriginosus* is given. The bullæ are small and not well formed though numerous, but the pruriginous itching is most distressing."

Kaposi (1880) describes pemphigus *pruriginosus* as an affection characterized by severe and annoying pruritus which destroys sleep, and causes more or less nervous disturbance. Not only bullæ but urticarial wheals may appear, together with all the signs of persistent pruritus, as excoriations, scaly and crusty eczema, hyperpigmentation in spots and streaks, and dryness of the skin, the lesions invading every part of the body.

Robinson (1884) says: "These small bullæ are found widely scattered

over the surface of the body, which soon rupture and leave infiltrated red, pruriginous spots. This is the chronic form of the disease, and successive crops follow one another continuously. The itching is most severe."

Hardy (1886) says: "In one variety of chronic bullous pemphigus the skin is the seat of excessively severe pruritus; the bullæ, however, are small and numerous, and succeed each other rapidly, and the skin acquires the brownish discoloration similar to that met with in chronic prurigo. This is the variety described by many authors, and especially Cazenave, as *pemphigus pruriginosus*."

McCall Anderson (1887) says: "The skin is occasionally the seat of intense irritation (*P. pruriginosus*), but the eruption is often more an inconvenience and disfigurement than a source of distress and pain to the patient, although some burning and tension may be experienced when the bullæ are forming, and some stiffness and discomfort at the seat of the crusts."

The writer has met with perhaps half a dozen cases to which he has applied the name pemphigus pruriginosus for lack of a better one. These cases presented the common features described by the older writers—namely, small bullæ, scratch-marks, a hyperpigmentation accompanied with severe pruritus, and, according to the length of time the affection had lasted, with more or less depression of the nervous system.

Despite the authorities cited, we can not for a moment consider the disease in any way related to the one ordinarily termed pemphigus vulgaris. There is nothing in common between them except the accident of bullæ. What, then, is it?

Duhring would undoubtedly claim it as an example of his "dermatitis herpetiformis," and this would be an admirable name for it were it not that that author has, by including under it so many different affections, destroyed all claim it might have to a distinctive appellation. Robinson makes it out a variety of "hydra," which title has also been pressed into the service in connection with too many different affections to permit of our adopting it as the name of any definite morbid entity.

Unfortunately, the clinical history of this affection is by no means well understood, and the few cases that have fallen under the eye of the writer were seen but once or twice. The particular case which has suggested the foregoing remarks, and which is the subject of the illustrations, was sent by a physician of this city to my clinic at the university, with a note requesting a diagnosis and suggestions as to treatment. He presented the appearances that are well shown in the plates—namely, a vesiculo-bullous eruption scattered over various parts of the body, attended with some inflammatory phenomena and accompanied with severe itching. The usual melanic discoloration that in most cases attends severe and long-continued pruritus was notably present, in addition to the mechanical



lesions due to scratching. His general health was greatly impaired, and he complained of increasing feebleness. He was directed to return to the physician who had sent him with the diagnosis of pemphigus pruriginosus, and with the recommendation that he be placed on the use of arsenic. I did not see the case again until quite recently, when he was exhibited at a meeting of the New York Dermatological Society by Dr. Bulkley. He was then very much improved in general condition, and the tendency to the development of vesicles and bullæ had apparently ceased. Dr. Bulkley stated that he had been giving him large doses of arsenic.

The questions and reflections to which this and similar cases have given rise may be briefly summarized :

1. Is it allied to ordinary pemphigus? We think not.
2. Is it allied to herpes? As there is no definite affection bearing this name, we must ask whether it is related either to herpes zoster, herpes labialis, or herpes progenitalis. We are warranted, we think, in denying most absolutely any connection with either of the affections which claim the word "herpes" as a portion of their usually accepted names. We are forced, then, to let it stand by itself, waiting for a correct title, and waiting for a more definite knowledge of its ætiology and nature.

The apparent influence of arsenic in checking the development of vesicles in this case is quite in a line with the effects we have frequently seen follow its use in connection with other vesicular and bullous diseases. Mr. Jonathan Hutchinson was the first to call attention to its almost specific influence in pemphigus vulgaris, a fact which the writer has on several occasions been enabled to verify. Arsenic also, in his experience, is the only drug that exercises the slightest control over the course of the annoying affection known as relapsing herpes of the genitals. Arsenic, again, has proved its value in two cases of vesiculo-bullous syphilide, which made no improvement under the use of mercury and iodide of potassium until arsenic was combined with them.

Using the term specific in a general sense, we are in the habit of saying that mercury is the one drug that possesses a specific influence in the *disease* syphilis, while the iodide of potassium may be considered as the specific in certain—notably the gummatous—*lesions* of that disease. An experience of many years has in like manner led the writer to the belief that arsenic exerts a very definite and specific influence in connection with disseminated vesicular and bullous *lesions*, irrespective of the underlying cause which may have induced the eruption; and he invites a fair trial of the drug in these conditions.

A CASE OF DEEP EXTRAPERITONEAL URINARY EXTRAVASATION EXTENDING INTO THE THIGH. RECOVERY.*

By EUGENE FULLER, M. D.,
New York.

THE following case occurred in the practice of Dr. Edward L. Keyes and seems of sufficient interest to deserve record. As Dr. Keyes's assistant, I had the opportunity of following it throughout, and a study of the literature of analogous cases has convinced me that this one has at least the peculiarity of being out of the ordinary line. The fatality of cases of deep urinary extravasation is far greater than where the infiltration has taken place anteriorly to the deep layer of the triangular ligament, and death frequently ensues in these cases of posterior infiltration before the inflammatory changes occur which enable us to mark the exact course taken by the offending fluid. In the case about to be reported the course of the extravasation could be accurately noted, and herein lies its chief interest. The literature of the subject possesses a number of cases in which deep extravasations into the thigh have taken place, but in these generally only dependent incisions for drainage seem to have been made, and the path of the infiltration was not traced. Then, also, in most instances of extraperitoneal extravasation there has been an accompanying fracture of the pelvis or extensive lacerations which disturb to a considerable extent the anatomical relations of the parts, thus allowing the extravasations to take some irregular path, and consequently robbing the cases of much of their value.

CASE.—Mr. X., aged twenty-eight, having urinated in a fine stream with effort for some years following a gonorrhoea, had never, owing to timidity, allowed instruments to be used, and finally, without active exciting cause, found himself in complete retention. A medical friend was summoned, and many and prolonged attempts with a small metallic instrument were made to enter the bladder. These efforts were unavailing. The bladder was not reached; hypodermics of morphine were administered; overflow occurred; and some hours later Dr. Keyes was summoned. On his arrival, only moderate distention of the bladder could be detected, but much blood, mingled with urine, was flowing from the rectum, due to a false passage forced through the prostate and the wall of the rectum. Owing to numerous false passages, it was impossible to enter the bladder with any instrument. External urethrotomy without a guide was therefore performed, and a large perineal drainage-tube inserted. The bladder was now carefully washed and distended through the tube, to decide whether there had been any vesical rupture. The fluid collected was found to correspond exactly with that injected through the drainage-tube. It was also clear. After the operation the bladder acted

* Read before the New York Academy of Medicine, Section in Surgery, January 13, 1890.

well, the drainage-tube was soon removed, and a large sound entered easily. No induration or trouble could be detected by an exploration of the rectum, but still the patient had a marked evening rise of temperature (over 104°), some hectic, great pallor, despondency, failure of strength, chills, and other symptoms indicative of suppurative changes, and gradually his right thigh became flexed upon the pelvis until it formed an angle of about forty-five degrees with the plane of the bed. The least movement of the limb gave the patient great pain. He had no tender or indurated areas around the hip-joint. Deep pressure in the right inguinal region at first seemed to meet with no abdominal resistance and to give no pain. After the lapse of some time, however, a certain amount of induration could be detected in the right iliac fossa, and measurements of the upper parts of both thighs showed the right one to be considerably the larger in circumference. The patient was etherized, and an incision made into the indurated area in the right iliac fossa. Much pus and discolored sloughs followed from the track of the incision. On introducing the finger, the true pelvic fascia covering the iliacus muscle could be felt unimpaired, the peritonæum, with its fascia propria of the French anatomists, being crowded away and split off from its loose connection with the pelvic fascia. On introducing the finger still farther, the external iliac vessels could be felt in their sheath intact; but a space of considerable size and V-shaped could be detected, having for its base the iliac vessels in their sheath, for its upper side Poupart's ligament, and for its lower side the ramus of the pubis, and through this space the pus found its way into the thigh, thus marking the original course of the extravasated urine. A very long silver probe was now introduced along the finger and through this hole. The probe passed on into the thigh to the outer side of the vessels at first, but it soon changed its course and passed under and to the inner side of these vessels, where its end could be felt from the outside through the adductor group of muscles. An incision from the inner side of the thigh through the fascia and muscles was now made down upon the point of the probe. A drainage-tube was attached by a silk thread to the end of the probe and pulled through the long channel. Perfect drainage was in this way established. The patient soon regained the use of his right thigh. His temperature became normal, and he gradually recovered perfect health.

In order to clear up some points regarding the anatomy of the fasciæ of the pelvis I made some dissections. First, the bladder was injected to render everything tense. Then the left ramus of the pubis was sawed through, thus enabling me to split open the pelvis and secure the necessary space. The intestines were then retracted, and the peritonæum carefully dissected off from the bladder and right pelvic region. The fascia propria of the French anatomists, which everywhere is quite adherent to the peritonæum, was now exposed. In places this fascia was found to be quite dense where it bound together the vessels on either side of the bladder; and, in fact, it seemed to act as a lateral support to the bladder. William Anderson, in his *Surgical Anatomy of the Groin, Pelvis, and Perinæum*, speaks quite fully of this dense fascia, which he calls ilio-vesical. An ex-

tension of this fascia propria forms in large part the thick sheath of the external iliac vessels as they pass under Poupart's ligament and out of the peivis. Another extension encircles the obturator vessels in their exit through the foramen, and still another invests the spermatic cord and vessels in their exit. It also envelops closely the bladder, and forms the dense capsule of the prostate. This fascia propria is but loosely connected with the true deep pelvic fascia, thus allowing a comparatively easy pathway for infiltrating or burrowing fluids. The dissections showed how readily a fluid, once between these two layers of fasciæ, could extend its course out of the pelvis and into the thigh, either as in the case reported by following along externally to the sheath of the external iliac vessels, or likewise along the sheath of the obturator vessels, although much more resistance would probably be offered to a fluid taking this latter path by reason of its narrow limits. The connection between the capsule of the prostate and the walls of the rectum is very slight, and the manner in which motion is allowed them with reference to one another reminds one of a bursa. If, therefore, the capsule of the prostate were perforated, as was the fact evidently in the case we have under consideration, and a certain amount of urine had once reached this space, it would find little resistance in following its course between the deep pelvic fascia and the fascia propria, as the dissections and the exploration show that it did in this instance.

The following cases seem to have been somewhat similar to the one reported, although neither of them resembles it exactly :

Case of Jeanmaire, taken from Dr. Max Bartel's *Die Traumen der Harnblase* : Man, fifty years old, buried by falling of a heap of bricks, developed a tumor over the right thigh, which extended to the knee. There was inability to pass water. Bladder greatly distended ; catheter drew off bloody urine. On third day urine passed spontaneously. On thirteenth day incision of the fluctuating tumor of the thigh. Much purulent urinous fluid was evacuated. Urine flowed from the wound except when patient lay on the side. Recovery in thirty days.

In this case very likely the infiltration took the same course as in the case I have reported. Bartels, however, in his collection of cases, does not make mention of the infiltration taking the course I have described. In fact, I have failed to find anywhere a similar description. He speaks of the urine in cases making its way into the thigh through the obturator foramen, as I have shown that it might do, although that course does not afford so wide a channel as the one by the external iliac vessels :

St. Bartholomew's Hospital Reports, 1874, p. 43 : A boy fourteen years old fell backward upon the sharp end of a pair of tongs, which passed into the rectum through the anus. He was admitted the next day with marked symptoms of peritonitis. Two days later the serotum was incised on account of œdema and inflammatory swelling. On the third day urine escaped with the fæces. On the fifth day a catheter drew off some fœtid urine. Death on

the ninth day. On post-mortem examination, a small puncture of the bladder through the anterior wall of the rectum was discovered. Extravasation of urine had taken place behind the peritonæum as high as the ribs and downward into the scrotum and into the front of each thigh.

In this case the amount of urine infiltrated was presumably much greater than in the present case; consequently the infiltration had extended high up behind and above Poupart's ligament, thus involving the scrotum. These deep infiltrations can not extend high up in front, for the reason that both the fascia propria and the pelvic fascia merge into the tough transversalis fascia, whose layers admit of no separation.

1 PARK AVENUE.

TUBERCULOSIS OF THE SKIN.

By JOHN V. SHOEMAKER, A. M., M. D.,
Philadelphia, Pa.

(Concluded from page 97.)

IN the case which is the subject of these remarks the disease existed for many years upon the integument without, as far as I can learn, giving rise to any signs whatever of systemic involvement. Within a year past, however, necrosis of the occipital bone has announced that this immunity has been lost. An investigation of the chest informs me that pulmonary tuberculosis has begun. For a period of at least ten years, therefore, the disease remained localized upon the integument, sparing the deeper structures; that is, provided the process has been of the same type from the beginning, and from the history I have but little hesitation in concluding that such has been the fact. It may be that the very extent of the local lesion has operated as a preservative from general infection. M. Bouchard has lately contributed to the French Academy of Science an interesting and valuable paper upon "the rôle and the mechanism of the local lesion in infectious maladies."* He finds that among different animals inoculated with the same morbid germ severe local reaction may follow in one and be absent in another. Yet in the latter case systemic infection will be violent, in the former mild or absent. The constitution, in other words, obtains the victory over the pathogenetic bacilli when the local disease is severe. Constitutional immunity may be due to several causes—to unfavorable local conditions for the proliferation of the microbe, to the phagocytic power of the white blood-corpuscles, or to the production by the microbes of soluble "vaccine" matters which are protective to the economy and enable it to resist the tendency to general infection.

* Le progrès médical, Nov. 16, 1889.

Be the explanation what it may, however, the resistance of the organism, so long successfully maintained, has at length given way. Other and more decided manifestations of tuberculosis are to be anticipated.

The magnitude of the local lesions, the escape of the system from contamination during so long a period, and the occupation of the individual suggest the thought that the skin may have become diseased through actual contact. Minute abrasions are almost always present by which a virus might be absorbed. The site of the malady upon the face and chest disfavors the theory that it originated from diseased cattle. It is difficult to understand why, if the germs were primarily absorbed into the system, localization should occur in a tissue so unfavorable to their development.

Cases of tuberculosis of the skin have been observed in which the presumptive evidence is strongly in favor of direct inoculation. Under the designation tuberculosis verrucosa cutis, Riehl and Paltauf have described a cutaneous affection different in form from the one which is the subject of this paper but in which microscopical examination revealed the presence of giant cells and tubercle bacilli. Most of the patients in whom it occurred were males, whose daily work brought them into frequent contact with animals. The lesions, moreover, manifested themselves upon the forearm, hand, and fingers. Constitutional symptoms were absent or long delayed. Finger has published the case of a man who died of general tuberculosis at the age of forty-one years, upon whose left forearm and hand verrucous patches had existed for twenty years. This form of eruption is peculiar. The patch is of small size, raised a little above the surface, of a round, oval, or serpiginous outline, and surmounted by wart-like growths. Surrounding such a patch is a brownish or livid zone within which isolated pustules are scattered. External to the zone of pustules succeeds one of erythema. A little pus is found in the fissure between the warty outgrowths, but the disease manifests no tendency to ulceration.

The researches of Buhl, Villemin, Cohnheim, Schüller, and others concerning the anatomy of tubercle, the infectious nature of the disorder of which it is the product, and the relationship which exists between tuberculosis and scrofulosis, culminated in the demonstration by Koch of the specific bacillus whose development within the animal body inaugurates the process which we know as tuberculosis. The observations of his predecessors were confirmed, corrected, or explained, and a flood of light thrown upon tuberculosis in particular and infection in general. The kind of connection and the degree of intimacy between scrofulous and tuberculous disease is a subject which must still be regarded as undetermined. But it has been clearly shown that we now possess in the characteristic micro-organism a more reliable test of the nature of a suspected lesion or product than is to be obtained from an examination of the histological structure of tubercle. The announcement, therefore, that the bacillus tubercu-

losis had been detected in portions of tissue taken from cases of lupus vulgaris suggested the conclusion that this cutaneous affection is a localized form of tuberculosis. This argument has been lately maintained by very eminent authorities, among whom I may particularly name Koch, Friedländer, Doutrelepont, and Besnier.

In order, however, to determine the pathogenetic power of a micro-organism it is not sufficient merely to demonstrate its presence in the lesions or products of a disease. It must be isolated by cultivation in some sterilized medium; this cultivation must proceed through several generations, and, finally, bacilli descended from those found in the disease which is the subject of study must be found, when introduced within an animal body, to give rise to that disease. These are logical rules, and they have been laid down by Koch as necessary to the satisfactory demonstration of the aetiological relation of any microphyte to a definite disease process. They are the rules followed by Koch in his classical studies on the bacillary origin of tubercle.

Koch himself has detected the tubercle bacillus in lupous tissue. They have also been found in other cases by other observers. Further experiments have been made by Leloir, of Lille, Benson, of Dublin, and many others. Small particles of lupous tissue placed in the anterior chamber of the eye have occasioned tuberculosis of the iris, within the peritoneal cavity have given rise to general tuberculosis. M. Trousseau, of Paris, detailed to the French Ophthalmological Society, at its sixth congress, held in Paris, August, 1889, the results of observations which he had lately made upon this subject. Little masses taken from a lupus of the conjunctiva were introduced into the anterior chamber and cornea of the eye of a rabbit. The operation was repeated in four instances—twice into the anterior chamber and twice into the substance of the cornea. A well-marked tuberculosis followed in three cases, while in one case the result remained doubtful. The tissue of the cornea appeared to be a less favorable seat than the iris for development of the affection. Another interesting illustration was reported to the International Congress of Laryngology and Otology, convened in Paris, September, 1889. A patient of Dr. Wagner, of Lille, had long been afflicted with a lupus of the nose. Some little pieces taken from the affected mucous membrane were inoculated into the peritonæum of a rabbit, according to the method of Leloir. The inoculation was performed on the 20th of June, 1888, and the animal died on the 28th of November. The spleen was found enlarged to thrice its normal size, and stuffed with tubercular nodules. The liver was likewise studded with similar masses, and the tracheo-bronchial glands were involved. A piece of the spleen was deposited beneath the skin of a second animal, which perished on the 2d of January. It was the subject of a general tuberculosis.

The results obtained in the experiments are certainly interesting, and suggest that lupus may be a localized manifestation of tuberculosis. Yet is this conclusion the only or the necessary interpretation of which the facts admit? They demonstrate that injection or inoculation of matter containing tubercle bacilli will produce, if the bacilli meet with a fit soil for their development, tubercular nodules, either localized or generalized. But upon this point there could be no dispute. Are we, however, obliged to believe that the bacilli tuberculosis present in the inoculated lupous tissue were the origin of the lupus? In order to secure belief in this proposition it should be demonstrated that the bacillus is always to be detected in lupous nodules or ulcers. It is greatly to be desired that a series of cases of lupus should be carefully studied with especial regard to this question. If the microscope should reveal that, in a succession of cases of lupus, bacilli tuberculosis existed from an early stage of the disease, it would not be possible to avoid forming the opinion that these micro-organisms stood in a causative relation to the disease. It scarcely appears that at the present time we are warranted in making so broad a statement. In the *Lancet* for April 20, 1889, Dr. James Goodhart relates the case of a young woman, twenty-six years of age, who was afflicted with a huge lupous ulcer upon the roof of the mouth, the inner surface of the cheek, the tonsils, and the anterior surface of the velum palati. There had been some loss of flesh, probably due to insufficient nourishment in consequence of the pain produced by the act of swallowing. It is noted that her general health was good, and that her lungs were sound. Search was made for bacilli, but without success.

Again, what should be the result of inoculation of the skin of an animal with lupous material? Ought not a cutaneous disease to result corresponding to lupus in the human subject? The success of control-experiments would form the most convincing argument. If lupous matter taken from man should give rise to tuberculosis in an animal, why should not tubercle material taken from this artificially infected animal occasion lupus when applied to an abraded or blistered skin of another animal? The experiment could also be varied by placing tubercular tissue from a human subject upon the skin of an animal abraded or wounded in such a manner as to insure an absorbing surface. A case having some bearing upon the topic of discussion was lately published from Unna's Polyclinic by Dr. von Düring.

A girl, fourteen years of age, belonging to a healthy family, removed the rings from the ears of a friend who had died of phthisis, and placed and wore them in her own ears. An ulcer soon formed upon the lobe of the left ear. The tuberculous character of this ulcer was attested by the presence of tubercle bacilli. Suppuration of a cervical gland followed, and finally well-marked pulmonary consumption. Nothing is said of any resemblance between this ulcer upon the ear and the ulcer of lupus.

From a clinical point of view the two affections, tuberculosis and lupus, are by no means identical. The experience of Kaposi, who has enjoyed the opportunity of observing so many cases of lupus, has convinced him that this disease should not be regarded as a tuberculosis of the skin. He points to differences in the course of the disorders, and in the gross appearance of the lesions to which they give rise.

Another objection to the theory of the tubercular origin of lupus is the comparative infrequency of its association with consumption of the lungs. If lupus were but localized tuberculosis, we should expect it to co-exist much more commonly with the most usual form of infection. The evidence upon this aspect of the subject is conflicting. Besnier and Lailler found that in twenty-one per cent. of patients afflicted with lupus some recognized form of tubercular infection was also present. Of thirty-eight cases of lupus examined by Doutrelepon, fifteen were found to have a tubercular family history, while Leloir, out of nineteen cases of lupus, found no less than ten patients the victims of phthisis. And, according to other observers, the percentage of undeniable tubercular manifestations in lupous patients is much higher, varying from sixty-two to seventy-nine per cent. On the other hand, Dr. Raudnitz, who has investigated two hundred and nine cases of lupus treated in eight and a half years at the clinic of Professor Pick, of Prague, arrives at a different conclusion. He says: "Lupus manifests the same form, whether it develops in persons of a strumous or those of a sound constitution. A hereditary tendency to tuberculosis was present in only from ten to fifteen per cent. . . . Contemporary attacks of lupus among blood relatives were extremely rare. Transmission from parents to children had not occurred in a single case. The rare combination of lupus with pulmonary tuberculosis is in decided opposition to the doctrine of their identity." He proceeds to state that thirty per cent. of the cases developed upon or in the neighborhood of scrofulous scars, or upon mucous membrane altered by chronic catarrh. Twelve cases, also, were apparently of traumatic origin, and eight cases followed attacks of erysipelas. "It would seem," adds this author, "in many cases a local specific lupous disposition was present, the nature of which is purely conjectural." Dr. Pontoppidan, of Copenhagen, who studied one hundred cases of lupus which had presented themselves to the City Hospital, found only three cases in which any hereditary influence could be traced. In the United States lupus is considerably less common than upon the continent of Europe. I am not aware that any comprehensive examination has been made in this country relative to the occurrence of tubercular antecedents or manifestations in the subjects of lupus. Dr. J. Nevins Hyde, of Chicago, reported a series of twenty consecutive cases which came under his observation, and remarks that the family histories are particularly defective in regard to association with constitutional

disorders. One parent only is stated to have died of phthisis. This writer calls attention to the infrequent occasions upon which a patient suffering from phthisis is referred from the medical to the dermatological department in any of our hospital or college clinics on account of a coincident lupus.

In the remarks suggested by the case whose history I have described I have no desire to place myself in decided opposition to the theory that lupus is but a localized form of tuberculosis. The fact that lupus is often associated with serofula or followed by phthisis, the parallelism which exists between lupus verrucosa, verruca neerogenetica, and tuberculosis verrucosa—above all, the discovery of the tubercle bacillus—tend strongly to favor an identity of origin. But, on the other hand, it has not yet, I believe, been satisfactorily shown that the bacillus is invariably present in the lesion of lupus, and the facts relating to inoculation may, I think, be susceptible of a different interpretation to that which has been given. The subject has not been cleared of all its difficulties, and a final judgment should still be withheld.

CLINICAL OBSERVATIONS ON INTRAMUSCULAR INJECTIONS OF INSOLUBLE MERCURIAL SALTS IN SYPHILIS.

By HERMANN G. KLOTZ, M. D.,
New York.

(Continued from page 103.)

IMMEDIATE *Effects on the General Health and Remote Organs of the Body; Salivation.*—An effect on the system and the general health is, as a rule, not noticed unless swelling or abscess occur. Only after the injections of calomel, which again proves to be the most formidable and annoying of the salts, could an influence be felt. The patients could not give an exact expression to the feelings of nervousness and restlessness, to the heavy and feverish condition which they were subject to; they feel how the medicine works through the system, was the usual description of the condition, which outwardly was marked by signs of anæmia.

Salivation was in almost all cases remarkably absent—certainly where the usual precautions were taken; the gums suffered much less than during internal treatment or during inunctions. Only in one case (10) it formed an unwelcome complication. The patient, on the recurrence of a papular syphilide five weeks after the last of a series of seven injections of the yellow oxide, received the first injection of calomel on the 10th of February, which did not show much effect on the eruption until the 17th, when a second injection was made. On the 24th, when a third injection

was given, there was still no decided change in the symptoms—much less, indeed, than had manifested itself during the injections of the yellow oxide. But very soon after the third injection the effect on the general system began to be felt, and rather severe salivation set in, aggravated by the swelling of the gums around the so-called wisdom teeth, which, unfortunately, were just making their appearance. With very good care the worst symptoms soon disappeared and the oral cavity returned to a healthy condition within two weeks, while the eruption vanished within a few days. I can not doubt that, for some reason or other, absorption had been retarded, and, when it began after the third injection, the quantity of mercury at the disposition of the system was quite large. This *retarded and temporarily suspended absorption* of the mercury constitutes, I believe, the greatest or the only real danger from the injections of insoluble salts, and for that reason I have given my experience in detail, the more so as I find that Bloom, apparently citing from some German paper, assumes a much different condition, which, if true, would indeed render the method of injections of insoluble salts an ideal treatment. Bloom * writes: “The period of maximal elimination is prolonged if injections are given later but during the period of maximal elimination, but the amount is not increased.”

“The possible objection that, once injected, the effects of the mercury can not be controlled should salivation occur, is set aside when we consider the fact that only a certain quantity is eliminated at a time, that the permanency of the time of elimination of this quantity is affected by a fresh injection, and not the quantity eliminated—*i. e.*, absorbed.”

Mandry † has recently reported from the service of Professor Leichtenstern a case of necrosis of both maxillary bones caused by the effect of prolonged injections of the gray oil, and Runeberg's ‡ cases of death from ulceration of the bowels, similar to those observed by surgeons after external application of corrosive sublimate, give abundant evidence that there exists such a danger of cumulative effects.

Diarrhœa, as the consequence of the influence of injections on the intestinal tract, was observed but once (Case 18); within a few hours after the first injection the patient had three or four loose passages, without pain or inconvenience, which ceased voluntarily. It is probable that this diarrhœa was produced by reflex rather than by absorption of mercury, which could hardly have taken place within so short a time. After the injection of the yellow oxide a certain looseness of the bowels was always observed in this case, but a dose of bismuth and opium, given a few hours after injection, prevented the occurrence. After the salicylate it was observed in a very mild degree only.

* *Loc. cit.*

† The same, 1889, No. 1.

‡ Deutsche med. Woch., 1889, No. 35.

It remains to report on another occurrence, which probably has to be considered as a consequence of an injection. On November 20, 1888, about 9 A. M., a patient (No. 19), who had gone through a series of yellow-oxide injections before without any untoward symptoms, received the first of a series of calomel in oil. I was called to see him at his residence on the afternoon of the third day, when I was informed that a few hours after he left my office, the leg nearest the seat of the injection feeling somewhat heavy, he began to feel slightly feverish, and in the afternoon about 4 P. M. had a chill. He was in high fever all through the night, but went to his place of business the next morning. He had to return home, however, on account of alternating chills and heat, which continued through the night until I saw him, accompanied by severe pain in the left side of the chest, difficulty in breathing, with slight but painful cough. I found him with a temperature of 102° F. in the axilla, pulse 84; the symptoms he presented were those of pneumonia, although, besides a few rhonchi, no physical signs of infiltration could be found. The next day, after profuse perspiration during the night, I found great improvement; temperature 98° F., very little pain, and no difficulty of breathing, and within another twenty-four hours all symptoms had disappeared. Only then the patient began to feel the influence of the absorption of the mercury in the mouth as well as generally; locally there was no swelling present, and hardly any sensitiveness on pressure of the spot. I was at a loss at that time how to account for this occurrence, and in doubt whether it was a direct consequence of the injection or merely a coincidence. In the light of a subsequent publication in the *Archiv für Dermatologie* by Lesser, of Leipzig, I am inclined to believe that embolism of the oil forming part of the injected fluid into the lung had taken place, which might well explain the symptoms. This opinion has been confirmed by Watraczewski, who, before the late International Congress of Paris, reported on a number of experiments on animals which seem to prove that injections of oily substances, without the addition of mercury in any form, may produce embolism of the lung. This experience for the present leaves a cloud on the use of oil as a vehicle for the injections over the bright advantages of very slight pain and local irritation. Another patient of mine (Case 10) last spring, about ten hours after an injection of calomel in oil, began to complain of pain in the chest. Not thinking of the possibility of its connection with the injection, he consulted his family physician, who told me that he could not find, on physical examination, any particular cause for the pain, and assumed the presence of a mild pleuritic affection; he conceded, however, the possibility of oil embolism in the lung after I had called his attention to it.

After reporting in detail all the unfavorable consequences of the injections in my experience, I shall certainly not be accused of partiality if

I shall give but a brief *résumé* of the effects on the *symptoms of syphilis*. In general, my experience does not differ much from the reports of others. The affections of the skin were all very favorably influenced; the early macular and papular syphilides disappeared rapidly after two or three injections, and, as a rule, had left no trace when the last injection of the series was made. Undoubtedly, eruptions of this kind, and even recurrent papular ones, sometimes are removed quickly by internal treatment, or may disappear even spontaneously, but this certainly is not the case with the large, flat, lenticular syphilide, which I have seen resist for weeks even the most energetic inunctions. In Cases 7 and 8 it required eight injections of the yellow oxide to reduce these tough papules to slightly pigmented spots, and, on their recurrence, four injections of calomel to destroy even the last trace of pigmentation within a few weeks after the treatment was stopped. Somewhat less pronounced was the influence of the insoluble salts on some of the pustular syphilides. Still, the injections showed no less effect than any other treatment. In several cases which showed a rather malignant type the effect was increased by simultaneous administration of iodide of potassium, and its continuance over the period of injections. The tubercular syphilide was at first very favorably affected by the yellow oxide, but the effect was not lasting, and after the early recurrence iodide proved more powerful; still, it would not prevent the formation of a gummatous periostitis several months later.

The affections of the *mucous membranes* of the oral cavity and the throat were not less favorably influenced by the treatment than those of the skin; even the deeper ulcerations healed rapidly, but in two instances new ulcerations on the posterior wall of the fauces were seen to develop during the period of injections, so that iodide had to be substituted. Indolent enlargement of the *lymphatic ganglia* was quite often reduced under the influence of the injections, while in those cases where injections were applied since the appearance of the secondary symptoms hardly any swelling of these organs was observed. Persistent *primary induration*, outlasting the first year after infection, gradually disappeared in Case 10, as has been mentioned already, during a period of entire freedom of treatment after the injections.

In the two cases of tertiary syphilis the effect of calomel injections was very satisfactory. In the first case dissolution of the gummatous infiltration of the thigh, which had resisted continued treatment with mercury and iodides, including inunctions, for over a year, took place during a series of six injections, extended over a period of over three months, and a large quantity of watery fluid was discharged from an opening on the lower part of the thigh. Later on several pieces of bone were eliminated, after which the patient has remained well. In the second case of cerebral syphilis the gravity of the symptoms made it advisable not to

trust to iodine alone, the more so as the headache complained of became worse. As inunction, which I should have preferred in this case, could not be made, I did not know of anything more reliable than calomel injections, and I have no doubt that they contributed in a great measure to the good and quick results of the treatment. To judge of the *influence* of a method of treatment *on the course of syphilis* and on the comparative frequency of *relapses*, is a most fallacious undertaking under any circumstances, considering the widely different character of the disease from the mildest to the most malignant cases. When we remember that often enough the disease hardly shows its influence without any treatment, it is very difficult to say in others whether a cessation of symptoms was spontaneous or due to treatment. Of those cases which were treated exclusively with injections, Nos. 10 and 13 did not make the impression of an extremely mild infection, although but little of syphilitic lesions was really developed. No. 9, however, was apparently mild, and might not have shown more symptoms under internal treatment, while the two remaining cases (20 and 22) are of too recent date to allow of any deductions to be made from them. In those cases (Nos. 3, 4, 5, 7, 8, 19) mentioned before where continued internal treatment preceded the injections, it has decidedly the appearance as if the injections had put a final and decided stop to the pertinaciously recurrent eruptions. But even here it must be said that the patients were approaching a period of the disease where recurrences become less frequent in consequence of the natural course of the disease. In the earlier periods I can not maintain that the injections were much more powerful to prevent the recurrence of symptoms than other modes of treatment.

There is, however, a great difference in the effects of the different salts, calomel undoubtedly taking first rank and showing much stronger action than the yellow oxide and the salicylate. It seems that the effects depend to a certain degree on the quantity of metallic mercury contained in each salt, and that it requires a larger number of injections if the salt contains a smaller percentage of mercury. Indeed, while of calomel seldom more than four injections were necessary, of the yellow oxide and of the salicylate six to eight were required to attain the same results. This is in accordance with the observations on this question published by Jadassohn and Zeising, of Breslau (*Viertelj. f. Dermatol.*, 1888, 781, etc.). From microscopical examinations by the same authors, it remains doubtful whether really, as is generally assumed, the formation of corrosive sublimate takes place in the tissue preceding the formation of an albuminate. It seems rather probable that metallic mercury is formed with several stages of transition before absorption.

With the number of abscesses reduced to a minimum, with the painfulness of the procedure greatly diminished by the introduction of new salts

and new vehicles of suspension, with the dangers of cumulative and prolonged use better understood and therefore more easily avoided, I can not but consider the treatment of syphilis by injections of the insoluble salts of mercury one of the most valuable methods of mercurial treatment. I shall certainly continue their application in suitable cases in the future, and I sincerely hope that, by a candid and impartial report on my experience, others may be encouraged to give them a fair trial.

222 EAST NINETEENTH STREET.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

196TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Bromide Eruption.—DR. BRONSON presented a case of bromide eruption in a child six months of age. The child had been under treatment for some nervous affection accompanied with paralysis of the lower extremities, and had been given large doses of the bromide of potassium. The eruption began about four weeks ago, and two weeks later was first seen by Dr. Bronson. The lesions, five or six in number, were confined to the thigh and legs. They began as papules, pea size, which became pustular, followed by fleshy elevations of a tuberos character with funnel-shaped centers covered with crusts and ulcerating at the center. There was no specific history, and the eruption began to disappear as soon as the bromides were stopped.

DR. MORROW believed the case to be a bromide eruption. The lesions presented a certain resemblance to a form of bromic eruption described by Seguin as *ulcera elevata*. The crateriform center was somewhat peculiar, as there are usually a number of cribriform depressions instead of a single opening.

Lupus Vulgaris of the Cheek and Nose.—DR. BRONSON presented a case of lupus of the cheek and nose in a little Italian girl six years of age. The disease was of two years' standing and had been under observation for six months. When first seen there was a dusky-red, very hyperemic, and somewhat swollen patch occupying the end of the nose for a space about three fourths of an inch in diameter. At the border there were no distinct tubercles, but at the upper side a few pustular lesions. A little to one side of the center was a blackish crust. The curette was used pretty thoroughly. Under the scab there was a deep, round, excavated ulcer, upon the sides of which the curette made but little impression, the tissues not breaking down under it, as was usual in lupus. At present the ulcer had healed, but the patch had extended and was as red and swollen as ever, though there were still no well-marked lupous tubercles. Upon the left cheek, when first seen, there was

a dusky-red, oblong elevation, half an inch in length, looking like a scrofulous abscess of the skin. It had been incised and the thin, undermined edges scraped away. The ulcer had now healed, but the scar was red and infiltrated.

DR. ALLEN said that, although the case presented by Dr. Bronson did not present all the features of lupus, he would agree with him in the diagnosis.

A Case of Erythema Multiforme resembling Syphilis.—DR. FOX presented a case of erythema multiforme resembling syphilis.

DR. KLOTZ had no doubt of the syphilitic nature of the eruption on the thorax; in regard to the larger bluish patches, the want of symmetry in their arrangement rendered their erythematous nature somewhat doubtful. Some of the lesions, particularly those on the shoulders, suggested insect bites and subsequent insults by scratching.

DR. ALLEN said that he would consider the case as one of syphilis, although the lesions were not specially characteristic.

DR. TAYLOR had seen precocious gummata appearing as suddenly as did these nodose lesions in Dr. Fox's case, and looking exactly like the lesions of erythema nodosum. These could, however, usually be diagnosticated from the latter disease by the great amount of pain and the tendency they had to break down and ulcerate.

DR. KEYES thought the disease was an erythema from its history and the absence of any syphilitic lesions on the scalp or in the mouth.

DR. BRONSON thought the case presented by Dr. Fox an exceedingly interesting one, but its nature was difficult to characterize. While he would not venture a positive diagnosis, he was inclined to believe there was a combination of two affections. There were strong evidences of syphilis in many of the cutaneous lesions, but there seemed to be also a multiform erythema. In many places the latter had apparently undergone a secondary syphilitic infiltration. He believed that it was possible to account for the appearances by supposing that first a general erythema had been excited through irritation of the syphilitic poison at the nervous centers, and that afterward the cutaneous irritation had evoked a syphilitic infiltration in the erythematous patches.

DR. MORROW said that he agreed with Dr. Bronson as to the possibility of two morbid conditions being associated in this case. He thought that the lesions on the sides of the chest as well as those upon the scrotum were unmistakably syphilitic in character. The lesions elsewhere, especially upon the extremities, presented the aspect of erythema nodosum. It was well known, however, that an eruption presenting all the characters of erythema nodosum, and described by Mauriac as *erythème noueux syphilitique*, might appear in the active secondary stage. This eruptive form simulated so perfectly the inflammatory swellings and nodosities of ordinary erythema nodosum that it was not possible to differentiate them except by the presence or previous history of syphilitic accidents.

Ichthyosis Linearis Neuropathica.—DR. CUTLER presented, through the kindness of E. J. Attinelli, a case of ichthyosis linearis neuropathica, or nerve nævus, with the following history: The patient was a boy five years of age, born in Italy. When six months old there appeared just behind the inner malleolus of the left foot a hard, scaly ridge, which gradually extended

along the inner side of the foot and up the leg, until at the end of a year it reached its present dimensions. As it appeared at present, the lesion began abruptly at the left buttock just opposite the great sacro-sciatic notch, and followed down exactly the course of the great sciatic nerve, the internal popliteal nerve, the post-tibial nerve, and the internal plantar nerve to the great toe. A second lesion, beginning on the left buttock, just to the inner side of the other, followed very closely the course of the small sciatic nerve for about three inches. These lesions were elevated about two lines and were about seven lines in width. They were very scaly, the scales being quite small and firmly attached. The child's health was pretty good, and, with the exception of some itching, the lesion did not seem to cause the child any uneasiness.

Alopecia Areata.—DR. MORROW presented a case of alopecia with the following history: The patient, aged twenty-six years, first observed in February, 1889, a spot of baldness on the temple just above the left ear; other spots soon appeared upon different portions of the hairy scalp. At the same time the hair of the bearded portion of the face began to fall out. The alopecic process gradually extended over the entire face, sweeping away in succession the mustache, the eyebrows, and the eyelashes. By the extension of the old spots and the development of new ones, the entire hairy scalp had become denuded of hair except a few tufts on the posterior region. The hair of the pubes had also been lost. Under various forms of treatment the patient had now begun to improve; fine lanugo hairs were discernible over the alopecic surfaces, which would indicate a favorable prognosis.

He believed that there were two forms of alopecia areata—the one tropho-neurotic, the other parasitic in nature. He did not think, however, that differentiation of these two forms could always be made by the clinical appearance and course of the disease. In this case it was fair to presume that the disease was parasitic, as the hair of the pubes had been implicated, while the hair of the intervening regions, the chest and the axillæ, was unaffected. There were multitudinous chances of direct transfer of the parasite from the head to the genital region in handling the parts.

DR. ROBINSON said he did not believe in the neurotic form of alopecia areata, but that every case was parasitic, and that all treatment should be based on that supposition. If no hair returned by the end of five years, the case was hopeless. Examination of the scalp with the microscope would aid very much in the prognosis by determining the exact condition of the hair follicles.

DR. PIFFARD said that he firmly believed in both the neurotic and parasitic forms of alopecia areata.

DR. MORROW concluded by saying that he had first used in this case chrysarobin and afterward chloroform and acetic acid, and, although numerous small hairs had returned, the improvement had not progressed with satisfactory rapidity.

Seborrhœa of the Glans Penis.—DR. MORROW presented a young man, aged twenty-one, suffering from seborrhœa of the glans penis. The disease had existed five years, and occupied the anterior three fourths of the dorsal surface of the glans. The surface was somewhat reddened and thickened and covered with an accumulation of thin imbricated scales, which some-

times attained a considerable thickness and extent, capping the entire diseased area. From friction or otherwise they would become detached and fall, leaving the exposed surface red and irritated until covered with another coating of scales. The patient occasionally complained of slight subjective symptoms of irritation and itching.

DR. TAYLOR said these cases of seborrhœa of the glans penis might be divided into three classes: 1. Cases which ran along for some time with simple formation of scales but not much thickening: responded to treatment but was quite apt to return. 2. Cases with circumscribed patches of scales with a good deal of thickening, resembling psoriasis: sometimes presenting a ringed appearance. 3. Cases which resembled leucoplakia buccalis. There was a true hyperplasia of the epithelium, very hard to cure, and apt to become cancerous. He had met with the best success in treating these cases of so-called seborrhœa of the penis with the oil of cade and of white birch.

DR. ALLEN said he believed these cases of seborrhœa of the penis were: 1. due to some deformity of the epithelium in spots caused by some former adhesions of the prepuce and preventing its normal production. The patient just presented gave such a history of adherent prepuce until he was fifteen years of age, and, when retracted, caused bleeding and soreness; and in a case of his own in which he had performed circumcision for adherent prepuce this seborrhœal condition persisted as a very chronic affair.

DR. KLOTZ recently had under observation a similar affection of the glans and inner surface of the prepuce which, originating from coitus *per os*, spread rapidly like a ringworm, and presented some features of parasitic disease. Under anti-parasitic treatment, even a mild ointment of the white precipitate of mercury, the parts became moist and fiery red, while generally they presented the same dry, scaly appearance as Dr. Morrow's patient. At first he had thought of an unusual form of primary syphilitic lesion.

DR. BRONSON said he could see no reason for regarding these lesions as a form of seborrhœa. Pathologically speaking, keratosis was a much better name.

Syphilitic Seborrhœal Eczema of Unna.—DR. TAYLOR presented a case of syphilitic seborrhœal eczema, as described by Unna, with a short paper on the subject.*

DR. ALLEN said he could not admit Dr. Taylor's statement that no cases of this mixed infection of seborrhœal eczema and syphilis of Unna had been reported in this country. He had himself at least spoken in this society of the seborrhœal modification of certain cases of syphilis which he had seen, where there was present a ring-formed syphilide aside from any complication with seborrhœa; still, there were cases in which there seemed to be a combination, the one eruption influencing the other.

DR. ROBINSON said that he had seen cases similar to the one presented, and he would consider Dr. Taylor's case a good example of the disease as described by Unna.

DR. KEYES agreed with Dr. Taylor in his diagnosis. In some cases the seborrhœal element seemed to be more marked than the syphilitic, while

* Will appear in the next number of this JOURNAL.

in others the syphilitic lesions predominated, depending upon the condition of the skin in each individual.

DR. BRONSON was familiar with cases of seborrhœic forms of syphiloderma such as those described by Unna; but he believed there was only one disease present, however, in such cases, the peculiar character of the syphilitic lesion being due to peculiarities in the character or the condition of the skin affected.

DR. MORROW said that Unna had sent him pictures of this peculiar form of syphilitic eruption. The seborrhœa was antecedent to the syphilis. The syphilitic eruption followed the course of the foregoing eczema seborrhœicum. He did not understand that Unna contended that there was, in any sense, a fusion or union of the two diseases, but simply that the antecedent seborrhœic process modified the outline and character of the syphilitic eruption.

DR. SHERWELL said that syphilis occurring in a patient with seborrhœal diathesis would have the syphilitic lesions modified thereby. The same would be true in patients having a psoriatic diathesis. He had long held these views in his discussions before the society; was in some ways an apostle of symbiosis, and was very glad to see that the members were beginning to coincide.

Sudolorrhœa.—DR. PIFFARD presented a case of so-called eczema seborrhœicum as described by Unna. The term seborrhœal eczema was also very objectionable, as eczema had nothing to do with the lesion, and he would therefore offer the term sudolorrhœa, in accordance with the results of Unna's microscopical investigations.

DR. TAYLOR said that, although he did not consider eczema seborrhœicum an eczematous affection, he thought the two diseases, eczema and seborrhœa, might occur together, and had seen examples of such.

DR. ROBINSON did not like the term given to the disease by Dr. Piffard, as the disease had nothing to do with the sweat-glands. The fatty secretion came from the coil-glands.

The society voted individually as to their opinion of the eczematous nature of eczema seborrhœicum, which resulted as follows: Eczematous, 5; not eczematous, 7.

The secretary read an inaugural thesis, by Dr. J. A. Fordyce, on Multiple Cavernous Tumors in a Child, illustrated by a chromo-lithograph and the microscopical appearances of sections of the lesions.

Rare Form of Pemphigus.—DR. ALLEN presented photographic illustrations of a variety of pemphigus seldom described—the circinate, serpiginous, or gyrate form. The patient, still under his care, had practically recovered, nothing remaining upon the surface but deeply pigmented spots and areas where the separate and confluent lesions had healed. The photographs showed how the original bulke had become surrounded by circles of smaller ones, and in some instances a second or third circle had formed.

Correspondence.

THE QUESTION OF IMPETIGO HERPETIFORMIS.

To the Editors of the Journal of Cutaneous and Genito-urinary Diseases :

DEAR SIRS : I am compelled to ask for a little space in this month's issue of your Journal for reply and explanation of some points regarding myself in Dr. Brocq's last letter in the number for March, 1890.

First of all, Dr. Brocq, in relation to my published case of so-called impetigo herpetiformis in the number for December, 1889, of the Journal, takes exception to the words used commencing, "If the fact is so," etc., and argues as if they were a reflection upon him. Truly, here I must disclaim all idea of impugning the doctor's veracity; it almost seems ridiculous in me to insist on this, the fact being that my meaning, as would seem to be evident, relates to the general proposition conveyed in the text, and I beg the doctor so to understand, as it was understood by those who heard the paper. My choice of words was, perhaps, unfortunate; I had not known or been advised by any dermatological colleagues, if they so knew, of the fact of Dr. Dühring's changed convictions regarding the disease or genus of diseases in question—the conviction almost of a lifetime with him—and I confess it came to me with a sort of stunning surprise. Since, however, he, Kaposi, Besnier, Vidal, and Dr. Brocq have spoken and are one on this question, it does not seem as if a high private could hold out any longer—one should not be "more royalist than the king."

I have, however, read, with all the thought of which I am capable, the long and able monograph of Dr. Brocq, and other articles from other sources, bearing on this infinity of manifestation of Protean bullous diseases, and I fear yet I shall go a doubting Thomas to my end, with an inchoate idea that they all have a somewhat similar ætiology.

Sincerely,

BROOKLYN, *March 8, 1890.*

S. SHERWELL.

Selections.

Eczema of Galvano-metallic Platers.

A. BLASCHKO, of Berlin, describes a form of eczema in galvanizers which he has observed as occurring in later years with increased frequency. This form is found in those working in manufactories where metallic wares are made and plated—galvano-plating, which is now done by male and female workers. It is most frequently found in makers of fancy metal belts, workers in gold, as well as those employed in jewelry and fancy ware manufactories where galvano-plastic work is carried on, surgical-instrument makers, etc. In these patients one finds a subacute or a chronic eczema, in some cases exclusively on the dorsal surface of the fingers and hands, the

wrists, and sometimes the elbow-joint; in some cases the chronic eczema spreads acutely over the entire body, first attacking the uncovered part of the body, as the face, ears, throat, and back of the neck. The disease at first makes its appearance in several (more or less) circumscribed places where the skin is cracked, the outer layer being thickened, raw, and fragile, full of pointed and linear rhagades. The favorite places for the appearance of this first form of the disease are the third phalanges of the three middle fingers, the interdigital folds, and the radial border of the wrist. In some cases larger surfaces of vesicular, pustulous, and impetiginous eczema develop from the primary points of appearance; vesicles start up between the old centers, and a large part of the dorsum of the hand, as well as the adjacent parts of the forearm, are attacked; this, however, is rare. Generally the original and first points of appearance remain as at first or enlarge gradually to the size of plaques of infiltrated rhagadiform eczema nearly the size of a dollar, between which freshly diseased parts and places, covered more or less with dry and scaly spots, develop; the remaining skin of the back of the hand shows mostly here and there superficial abrasions, small cracks with raised edges, and with a raw and often scaly surface. Not in all cases does an acute eczema of the other parts accompany the chronic form, which, by the way, shows but little tendency to heal; this acute form is generally found on the upper arm and forearm as grouped and highly reddened papules which nearly all scale off without passing over into the weeping stage. He cites the case of a young man whose work it was to prepare and boil the galvanic baths, where twice a papulo-vesicular eczema developed on the arms, face, and neck in a few days; it was accompanied by violent itching and great erythema of the parts mentioned. Numerous diffuse papules shot up within the erythematous parts; these were accompanied by single vesicles, and within a week the process went on to total desquamation of the outermost epidermal layers, especially of the face, neck, and forearms, where for a week after a mealy desquamation of the erythematous and extremely sensitive skin took place. From visiting and examining several factories where galvanizing was carried on he concluded it to be the cause. The most frequent procedure is nickeling; then follow bronzing, coppering, plating with brass or silver, while gold, steel, zinc, tin, and lead plating are relatively but little done. These procedures are divided into three acts—preparation of the bath and article, plating, and burnishing. Large zinc and brass articles are plunged into an alkaline bath, and then into a mixture of strong acids, to free them from dirt and grease; smaller articles are placed in a benzine bath, where they are brushed and cleansed of grease, then plunged into a galvanic bath, then removed and dried. Thus the acids may cause a violent dermatitis, as the case of a workman under Blaschko's care shows, whose hands are colored yellow by nitric acid. The benzine and lime also affect the skin of the hands, etc., causing a dermatitis of the arms and hands during the first few days at this work; it soon passes away, however. The lime gets into the softened epidermis after its fat has been soaked out, causing erosions, rhagades, and superficial inflammations.

As to the therapy, if they leave off work the dermatosis is easily cured by ordinary measures. Boric-acid ointment, ung. diachyl., salicylic-acid paste,

and, in obstinate and inveterate forms, ten to twenty per cent. salicylic-acid soap plasters, are equally good; in the latter stages tar is the best, used first as a lotion and then as a tar and zinc paste:

℞ Olei rusci,

Amyl. pur.....āā 5·0;

Unguent. zinci..... 20·0.

Prophylaxis is of great importance; those who work in the acids, benzene, and lime should use rubber gloves, avoid touching the corrosive acids, and after leaving off work at noon and evening, but never during working hours, the hands and arms should be well rubbed with some cheap grease; the plasters should not touch the lime at all. If they must return to work before the lesion has entirely disappeared, then one may apply salicylic-acid paste to the parts which do not touch the articles and a zinc preparation to those which do. One person should not plate and brush off in the lime-water; the articles should be laid into running water by means of a long-handled and large-meshed sieve, whence the plater takes them out singly by metallic hooks, thus avoiding the principal causes.—*Deutsche medicinische Wochenschr.*, 45, 1889.

Rectal Administration of the Iodide of Potassium.

PROFESSOR KÖBNER writes in the *Therapeutische Monatshefte*, November, 1889, upon the use of iodine and bromine preparations by the rectum in the treatment of local as well as of general affections.

He first speaks of the method of employing the iodide of potassium in the form of salve or suppository for the relief of chronic prostatitis, a wax-like salve being made with one part of the iodide and three and five sixths of cocoa butter and one sixth of sweet-almond oil, and applied by the finger of an operator to the prostatic region through the rectum while the patient lies on the abdomen. To this salve the author occasionally adds the extract of belladonna or a suppository having about the same composition.

In sensitive patients a burning will be occasioned in the mucous membrane, which will result in the suppository being forced out despite the addition of belladonna.

The author was led to believe that small clysters of iodide of potassium solution were more rational than the slowly melting and more or less irritating suppositories. He began by using the following:

℞ Kali iod..... 3·0;

Kali brom..... 2·5;

Ext. bellad..... 0·3;

Aq..... 200·0;

of which one tenth, or twenty grammes, were added to fifty or a hundred grammes of warm water and injected once or twice daily.

Later on he found that the addition of pure tincture of iodine was very efficacious and well borne by the rectal mucous membrane. From three to ten drops can be added to each such clyster by gradually increasing the dose.

A few rare cases of syphilitic rectal ulcer, with attendant obstinate catarrhal secretion from the mucous membrane, were relieved by these injec-

tions after astringents and disinfectants had been used to no purpose. The absorptive power of the rectal mucous membrane was shown, by the detection of iodine in the saliva and urine after the injections, to be almost equal to that of the stomach. After a suppository of twenty-five centigrammes of iodide, the drug was detected in the saliva within twenty to thirty minutes, and, after a clyster of fifty centigrammes, the urine showed traces in from ten to twelve minutes. The method is thus seen to be of great importance in the constitutional treatment of syphilis, especially in those cases in which the drug is not tolerated by the stomach, but in which the indications for an iodide treatment are very marked.

Cases are related in which the happiest results were obtained by rectal administration when the iodide could not be given by the mouth. The dose may be gradually increased up to fifteen grammes for each injection, but if a marked idiosyncrasy exists, half of this quantity only morning and night may be given.

In brain syphilis mercurial treatment must be carried out at the same time by inunction or injection.

The author gives the following simple method of detecting the elimination of the iodide in the saliva: During its administration the anterior half of the tongue on its upper or lower surface, or the inside of the cheek near the opening of Stenon's duct, is lightly passed over with a nitrate-of-silver pencil so as to form several lines. These at once turn yellow, showing the formation of iodide of silver.

Lichen Ruber and its Relation to Lichen Planus.

DR. HANS VON HEBRA (Monatshefte für prakt. Derm., No. 3, 1890), considering this an opportune moment, makes a rigorous critique of the lichen question, since recent papers and the proceedings of the Paris Congress have shown much confusion to exist regarding it. He bases his remarks upon a paper of R. W. Taylor,* not only because of the high standing of this author, but also for the reason that he finds views expressed in it which are contrary to his own, and which he desires to oppose. In answer to Taylor's conclusion, that "lichen ruber is a distinct morbid entity, without the shadow of a relationship with lichen planus," the author states his belief that—

1. The cases put in evidence were not cases of lichen ruber (acuminatus) at all; and

2. That lichen ruber and lichen planus are forms of one and the same disease, which may appear one after the other in the same individual, or indeed occur simultaneously.

The diagnostic error committed by Taylor has been committed by others before him—viz., that of confounding lichen ruber with the *pityriasis rubra pilaris* of Devergie. The lack of implication of the whole organism in his case is a point of distinction between the two processes. In the former there is loss of bodily weight, lack of appetite, sleeplessness, and such severe symp-

* Lichen Ruber as observed in America, and its Distinction from Lichen Planus. New York Medical Journal, January 5, 1889.

toms, including intolerable itching, that a strong patient quickly succumbs to it. In lichen ruber there is just the opposite of what Taylor describes. There is always quite a firm, red papule, which undoubtedly is located in the cutis, having at first a quite smooth surface and all the appearances of an inflammatory new growth. It is shiny in the beginning, and only after a somewhat lengthy duration do scales form, while in Taylor's case we read that scales were present from the beginning.

Figures 3 and 4 of Taylor's article illustrate his descriptions in an excellent manner, but they are as good illustrations of pityriasis rubra pilaris as though they had been drawn from Besnier's descriptions of this disease. In true lichen ruber this regularity of distribution does not take place, and when either surface seems predisposed it is usually the flexor surface.

The peeling of the epidermis from the palms and soles in thick crusts is just what other writers have described in pityriasis; still, it does occasionally happen in lichen ruber, while in the former it is constant. Much the same may be said of the thickening of the nails. The author then speaks of the relative pigmentation following the two conditions, and, as a final point, discusses the danger of the one and the harmlessness of the other process, and, in answer to Taylor's statement that the preceding attacks in his case had spontaneously disappeared, he says such a thing has not been previously reported in lichen ruber, and every dermatologist knows how great an outlay of time and trouble is required to bring about healing of this severe disease.

Following the example of Taylor, the writer has made the following systematic differential-diagnosis table:

PITYRIASIS RUBRA PILARIS.

1. The lesions develop from the epidermis layer.

2. They are from the very onset scaly upon the surface—indeed, the recent lesions consist of nothing less than epidermic masses, which can, without difficulty, be scratched off.

3. The lesions are situated always about the openings of the follicles, especially of the hair follicles.

4. Correspondingly, the extensor surfaces, especially those rich in hairs, are in a high degree affected (elbows, ulnar side of the hand).

5. In microscopical cuts we find various grades of thickening of the epidermis, as well upon the surface as in the deeper parts, with here and there lengthening of the interpapillary projections of the rete mucosum, etc.

LICHEN RUBER ACUMINATUS.

1. The lesions develop from the cutis.

2. They are at first smooth and shining on the surface, and only when they become long-standing do scales form on the surface, which possibly in spontaneous course become confluent.

3. The lesions are not connected with the follicular openings when they first appear.

4. The flexor surfaces of the extremities are earlier and more intensely affected.

5. A decided collection of round cells is shown, above all in the papillary layer of the corium. This is more pronounced in the papules of lichen ruber than in those of lichen planus, etc.

6. The color of the lesion is at first scarcely different from that of the normal skin; later, from consecutive hyperæmia, a rose red or brownish-red color is produced.

7. While on the extensor surfaces of the extremities the original condition of roughness is maintained, on the trunk there develops a map-like surface covered with fine, small scales.

8. The concomitant symptoms are either almost *nil* or very insignificant. There is no pruritus, or very little; no burning, no restlessness.

9. No implication of the system at large in the local process, even when of long standing.

10. In spontaneous course, results in healing or long persistence without danger to patient.

11. Cure possible by external means alone directed against the epidermic accumulation, though sometimes difficult (Boeck).

12. After complete recovery, none or very slight pigmentation.

13. Never mucous-membrane affections.

6. The color is from the beginning a bright red, becomes later on dark, and may go over into a deep, rusty-brown red.

7. Upon all surfaces a quite evenly distributed thickening and roughness of the skin is apparent, both of which increase with the advance of time.

8. The accompanying symptoms are always marked, and may reach a high grade of development. Excessive, almost unbearable itching, burning, great unrest, convulsive twitching of the extremities.

9. Coincident severe universal symptoms, œdema, especially of the lower extremities, albuminuria, loss of sleep, great prostration, loss of weight.

10. In spontaneous course, results often in death, and always at least in decided marasmus.

11. Cure by means affecting the whole organism — arsenic (Hebra), sublimate, carbolic salve (Unna).

12. Deep-brown often black-brown pigmentation, which may last for months.

13. Concomitant mucous-membrane affections, especially of the mouth and vagina.

The author now passes on to his second proposition, that lichen ruber and lichen planus are but two varieties of the same disease, and relates histories of two cases, in one of which two years after a classical lichen acuminatus an equally typical lichen planus appeared, and in the other, twenty years after lichen planus on both shins following injury, there developed over the whole body a lichen ruber miliaris.

The author thinks these cases should put beyond doubt the question of there being two forms of the same disease. Before leaving the subject, recurrences and bullous formations are spoken of. The former he thinks has been so often observed that its possibility is not to be questioned.

As regards the production of bullæ, there is no doubt that they occur, though very seldom. He himself has seen it in one case only, in which a woman, sixty years old, suffered from a combination of universal lichen mili-

aris and a localized lichen planus. Immediately over the sacrum was a group of about a dozen large flat lesions, on a few of which he observed, several weeks after the beginning of an arsenical course and just as involution was taking place, the production of bullæ limited to the area of the lichen lesions. This bullous formation is nothing more than an incident of involution, of which the writer offers the following explanation: The infiltration in the cutis, when it reaches a sufficient grade to produce elevation above the skin level, raises the epidermis with it.

If the lesions have existed for a long time, despite the insignificance of the stretching, the epidermis loses its elasticity, and when the infiltration in the cutis disappears as the cure of the lichen takes place, it can no longer return to its original position, just as in other processes after disappearance of inflammatory swelling desquamation takes place. The bullæ in lichen planus have the significance of squamæ, but do not develop into scales, because the continuity with the normal epidermis at the border of the patch is not interrupted. As the papillary layer decreases in size a hollow space is left, and, as air can not gain access beneath the epidermis, loosened at the center, but not at the periphery, and as Nature abhors a vacuum, the cavity must become filled with a serous transudation which may come as well from the tissues themselves as from the blood-vessels of the papillæ. Bullæ do not form a new symptom of lichen ruber, but only result from the process of regressive metamorphosis.

Cornification of Mucous Membranes (*Pachydermia Mucosæ*).

OBSERVATIONS made by Dr. Posner, of Berlin, in Lassar's clinic, upon cornification processes which take place in certain mucous membranes of the body are published in the *Archiv für path. Anat. und Physiologie*, No. 3, vol. 118. Though the subject is one of little practical interest, the author deserves much credit for carrying out such original research and demonstrating as he does that mucous surfaces may become transformed into epidermis in the mouth, throat, nose, vagina, and urethra under certain pathological conditions associated with chronic inflammation. The question arises whether the mucous tissue in all of these regions possesses a common inherent character which makes these changes possible, and can tissue of undoubted mesodermal or entodermal origin degenerate into epidermal tissue? The author has undertaken to solve this difficult and interesting problem. He has taken the mucous membrane of the anterior urethra of the male, with good reason, as an instance of tissue of ectodermal origin. Reference is made to the clinical observations of Guyon and various others which have long made it probable that the male urethra is not to be regarded as an organ of uniform nature, but as composed of two distinct parts—the so-called anterior urethra, extending from the orifice to the bulb, and sharply defined from the posterior urethra (membranous and prostatic portions). If the former be an invagination of the external skin, analogous to the external auditory canal, then the latter belongs strictly to the bladder. Diseases of the anterior portion do not necessarily extend to the posterior, while those of the latter are only too easily associated with diseases of the bladder, ureters, pelvis of the kidney, and the kidney itself. Without going into details, it suffices to recall that the whole

pars cavernosa urethræ springs from the sexual folds formed from the primitive sexual eminence in the embryo which, in the case of the male, close to form the canal, while in the female the parts remain separated to form the labia minora. The anterior urethra, being a derivative of the external blastoderm, would thus seem *a priori* to be capable of extensive cornification. Examination is difficult because of the rapid maceration and change which occurs after death, but the author succeeded, by injecting the urethra as soon as possible after death with absolute alcohol, in obtaining suitable preparations for observation. The author does not discuss the nature of keratohyalin and its relation to keratin and eleidin, but he can not fail to call attention to the fact that in his preparations of stricture of the urethra the appearances favored greatly the theory advanced by Mertsching (These Archives, June, 1889) respecting the formation of keratohyalin. Its appearance closely coincides with the disappearance of the nucleus, and the first clearly seen drop of keratohyalin is in the immediate neighborhood of the nucleus. Beneath the epithelium of a stricture the markedly infiltrated tissue is raised up with distinct papillæ, and thus the similarity to the outer skin is put beyond all question and we have in stricture of the urethra an exquisite type of pachydermia.

Of all the mucous membranes of the body, that of the vagina has been longest and best known to be capable of transformation into cornification tissue even to a high degree, taking on a white, skin-like appearance when a portion has become exposed to the external air. The microscopic appearances lead to the same conclusions in relation to keratohyalin production, as mentioned above in speaking of stricture.

Without entering upon the examinations of so-called psoriasis linguæ and similar conditions in the nasal mucous membrane, suffice it to say the author shows that cylindro-epithelial mucous membranes of ectodermic, as well as tissues of undoubted entodermic or mesodermic, origin are equally inclined to horny cell production, and can take on a decided epidermic nature.

Syphilis and Tuberculosis.

ELSENBERG (Berliner klinische Wochenschrift, No. 6, 1890) reviews the literature of syphilis as predisposing to and complicating tuberculosis. At the present day the question meets with the explanation that in a tuberculous individual, whose whole organism suffers, the powers of resistance in the tissues are lessened, the nutrition suffers, etc. When such an individual becomes, in addition, infected with syphilis, the working of the combined diseases upon the organism has the greater effect. The syphilis then runs a malignant course, calls forth severe symptoms, causes much disturbance of the tissues, and favors the development of the already existing tuberculosis.

Verneuil says the two processes may run their course side by side independently or influence each other so as to produce mixed forms (morbid hybridity), having entirely different course and prognosis, and being differently affected by treatment. If scrofulosis (tuberculosis) influences the appearances of syphilis, the ulcerating products of the later stages are so metamorphosed as to be scarcely recognizable (scrofulo-syphilitic hybridity).

Among the characteristics of these forms belong freedom from pain, espe-

cially the lack of increased sensitiveness, which is a usual symptom of the true syphilitic type. For example, there is no photophobia, no supra-orbital neuralgia in inflammation of the cornea, no pain in joint and periosteal affections.

The author believes that the mutual influence of the constitutional diseases is not to be denied. The difficulty, however, of furnishing convincing proof lies in the fact that the syphilitic and tuberculous products very often have a similar appearance, and that the analogous microscopical picture of both products is not such as to give us any great aid.

Although tubercle-like nodules are not often found in syphilitic products, still the presence of giant-cells can not be regarded as rare, and they have been found, too, in the products of the earlier periods of syphilis, as in the papules and pustules.

Microscopical examination gives us quite as little aid in distinguishing the syphilitic from the tuberculous products, and hence in determining the differences in the mixed forms. The only means to make sure of the presence of this mixed form would be to find the tubercle bacilli along with the parasite of syphilis. This is still at the present day impossible. That there exists a parasite of syphilis the author thinks there is no doubt, and he believes it to be the one which Lustgarten has discovered; still, he himself has been unable to color it. He thinks Lustgarten's and Giacomini's methods of staining are not sure, and possess the disadvantage that the tubercle bacilli are very readily colored and less easily decolorized than the bacillus of syphilis for which it was originally devised. In coloring the mixed forms of syphilis and tuberculosis, the tubercle bacilli alone would be colored, and the examination would reveal a tuberculous product alone where there is in reality a syphilitic base.

Despite the difficulties of differentiation, the author presents the history of a case which he thinks must be regarded as an example of the mixed forms. He had looked upon the case as one of quite an ordinary form of syphilis complicated by an already existing tuberculosis. After death tubercle bacilli were found in abundance, but the bacillus of syphilis could not be found. The possibility of mixed ulceration has been shown in the larynx not infrequently, and Schnitzler has demonstrated that in syphilitic ulceration tuberculosis can develop. We know that after long-continued irritation in a given spot syphilitic parasites may multiply and occasion a syphilitic product, or give to an already existing product a syphilitic character. If such a possibility is admitted for syphilis, why, the author asks, is it not admissible that in already existing acute or subacute tuberculosis ulceration or other syphilitic change—even irritation—can attract tubercle bacilli to the affected spot, and thus lend to the ulceration or other syphilitic product a tuberculous character?

Acute Circumscribed Œdema of the Skin.

MAX JOSEPH, in a paper read before the Dermatological Congress in Prague, and published in the *Berliner klinische Wochenschrift*, Nos. 4-5, 1890, reviews the literature of the subject of acute circumscribed œdema of the skin, and gives three personal cases in illustration of his belief that it is an

independent disease attended with certain complications. The oedematous spots appear for the most part acutely in several places at the same time, reach their greatest development within a period of a few hours, and disappear after a longer or shorter duration as quickly as they came. New productions in other regions as the older lesions disappear may cause the disease to persist for a long time. The general health is not, as a rule, affected. Recurrences on the parts once affected are frequent. Men are oftener affected than women, and a strong inclination to transmission seems to exist. As conditions favoring the development are mentioned sudden cooling of the skin, catching cold, overexertion, etc. Transition forms between this oedema and urticaria are often to be noted. Rapin holds the condition to be closely allied to urticaria, and places it in analogy with Milton's giant urticaria, while Osler has shown a decided hereditary disposition, one family having the affection in five generations. In a case of Elliot, frequent constipation was noted with the appearance of the affection, and prevention of digestive disturbances and relief of constipation caused the disappearance of the oedema. Bleeding from one of several mucous membranes has been observed. The author relates the history of a patient presenting a hitherto undescribed complication—paroxysmal hæmoglobinuria. The patient was a five-year-old boy, whose ailment had existed for two years and a half. The lesions appeared upon the hands and face whenever he went out in cold and windy weather. The lesions were from the size of a pea to that of a plum, the left eyelid often becoming closed by the swelling. Parts covered by clothing were not affected. In summer the oedema could be produced by placing the hands in cold water. Urticaria factitia could not be called forth on the body. After catching cold upon one occasion, there was bloody urine accompanying an outbreak of the oedema. Four times since this the patient has had typical attacks of paroxysmal hæmoglobinuria attended with but slight general symptoms; pain, vomiting, and yawning being absent. So far as the author is aware, this complication has not been noted in the literature of the subject. In this case the oedema was not the consequence of the local blood change, but, contrariwise, following the oedema, hæmoglobinæmia and then hæmoglobinuria occurred. It is thus shown that oedema of the skin often takes place without paroxysmal hæmoglobinuria, but the latter never without the former.

The blood disturbance is not a general but only a local one, depending upon the effect of cold upon a particular part, and the blood-corpuscles show a changed appearance during the attack. In the second case there were signs of Basedow's disease, and the oedema had first shown itself six years before, when attacks of urticaria were also frequent; but, while the latter affected the whole body, the oedema came only on the hands, feet, lip, and once upon the tongue. The wheals often ran together, forming giant urticaria; but these lesions were always distinct from those of the oedema. An urticaria factitia could also be brought out on this patient. That the oedema was independent of Basedow's disease would seem to be shown by the fact that it appeared four years before the first symptoms of the latter.

In the third case, occurring in a man of thirty-seven, the oedema usually appeared in the face, lip, chin, and upper eyelid. The lesions occurred suddenly, and disappeared in from one to twenty-four hours. The arm, hands,

and feet also showed swellings sharply circumscribed, of normal skin color, of firm elastic consistence, and of somewhat elevated temperature. According to the patient's story, the first attack was attended with rheumatic pains in the right knee and foot. In one attack there was marked œdema of the right half of the tongue. This patient was addicted to alcoholic drinks, and the œdema appeared to follow excesses, and to disappear when drink was discontinued. Two groups of the affection are distinguished—one in which swelling of the skin is complicated with that of mucous membranes, and one in which it occurs isolated. Cold appears to furnish an ætiological factor, and in one case alcohol appeared to have a decided influence on the outbreak. Unna's view that œdema is occasioned by venous contraction the author regards as unproved. On the contrary, in all true nervous œdemas experimentally produced by irritation of a nerve authors have described a reddening of the swollen parts. The color of acute circumscribed œdema is never cyanotic, but always either pale, of the same color as the surrounding skin, or red. He can not admit Unna's theory of venous spasm. The fact that many patients present urticaria along with their œdema should not of itself cause us to confound the two forms of eruption. It is easily imagined that both processes could develop side by side in an individual, still it is not to be denied that a great resemblance between the two exists.

As regards treatment, patients sensitive to cold who suffer attacks when exposed should avoid as much as possible this exposure. Likewise one known to become affected after alcohol should be cautioned against its use. Some cases may be relieved by rest, foot-baths, relief of constipation, etc. Atropine has appeared to have good effect at times. Küssner has thought to find benefit from infusion of *secale cornutum*, and Graham from Turkish baths. Matas (New Orleans Medical Journal, October, 1887) has alone reported complete cure from large doses of quinine.

Treatment of Eczema.

PROFESSOR PICK, at the meeting of the German Dermatological Congress, held at Prague last year, read a paper embodying his views regarding the treatment of eczema.

In the development of the disease one should draw a clear line of distinction between the proper eczematous process and the septic complication called by Hebra *eczema impetiginosum*.

The indications to be fulfilled by treatment are to protect the skin from external irritation and to prevent local infection.

The following formula, which has been thoroughly tested by Pick, fulfills these indications, besides being quite unirritating:

R. Gelatinæ albæ 30·0;
 Aquæ dest. q. s.

Macerate for several hours, then liquefy over a water-bath, and evaporate to 75·0 by weight.

Add: Glycerini 25·0;
 Hydrarg. chlor. corros. 0·05.

The preparation should be applied with a brush, having beforehand been rendered liquid over a water-bath.

It is indicated only in the dry stage of the disease, as moisture prevents it adhering to the skin.

In the moist stage of eczema and for the chronic form of the disease, with more or less thickening of the cutis, the salicylic acid and soap plaster fulfills all the indications for a permanent antiseptic application.

The following formula is used by Pick in the preparation of his plaster:

R Emplastr. saponat. liquef.	100·0;
Acid. salicylic 5·0.	

Mix and spread on linen or cotton cloth.

To increase the adhesive powers of the plaster, twenty per cent. of olive-oil may be added to the above formula, and the amount of the salicylic acid may be increased or diminished according to the amount of infiltration of the skin.

The plaster must be cut into narrow strips and closely applied to the surface, where it may remain undisturbed for several days.

Immediately after its application the patient feels a burning pain, which, however, soon disappears, together with the distressing itching which attends the disease. When much moisture is present the first dressing may be changed on the third or fourth day; the further dressings may remain in place for eight days or longer. It is a good rule not to change the dressing until the patient is again distressed by the itching. As soon as the stage of moisture has passed, one may return again to the gelatin application, or they may be combined, the one to the moist regions, the other to the spots where scaling is present, or where a new outbreak of papules is taking place.—*Centralblatt f. die gesammte Therapie*, Januar 1890.

Book Reviews.

Syphilis tertiaire et syphilis héréditaire. Par le Docteur CHARLES MAURIAC, médecin de l'Hôpital du Midi, lauréat de l'Institut et de l'Académie de médecine. Paris: J. Ballière et fils, 1890.

THE publication of these lectures upon Tertiary and Hereditary Syphilis forms the continuation and completion of the author's masterly treatise on Syphilis, the first volume of which, devoted to Syphilis Primitive et Syphilis Secondaire, appeared in 1883. The two volumes, embracing nearly 2,300 pages, constitute a monumental work which fully justifies the author's ambition to write a treatise on syphilis as complete as is possible to make it in the present state of medical science.

In the older text-books, as the author states, the consideration of tertiarism occupied much less space than that of secondary syphilis, but at the present day the proportion is reversed. The domain of syphilis has been signally enlarged within recent years with the increasing knowledge of its profound and late visceral lesions, and this field will doubtless continue to be enlarged with the researches of syphilographers and pathologists, since the more syphi-

lis is studied the greater the number, the complexity, and the far-reaching character of its morbid processes. Quite a considerable portion of the first volume, and 1,071 pages of the present, are devoted to the consideration of the "innumerable manifestations" of tertiary syphilis.

While the old classification of syphilis based upon the chronology of its accidents is recognized by the author in the titles of his work, he prefers to divide syphilis into two stages—*primary syphilis* and *consecutive syphilis*. Consecutive or generalized syphilis may again be divided into two phases—one the toxic, or virulent stage, corresponding to the secondary period, and a non-virulent, or constitutional stage, corresponding to the tertiary period. The modern division of syphilis, based upon the anatomical character of its lesions, he rejects as defective and infinitely less practical than the preceding.

In his introductory remarks upon the general pathology of syphilis the author discusses the various hypotheses and theories which have been advanced relative to the nature of syphilis. He gives an interesting *résumé* of the investigations of Löstorfer, Klebs, Aufrecht, Birch-Hirschfeld, Martineau, Harmonic, and others. The more recent researches of Lustgarten are detailed at length, but the observations of other investigators, showing that Lustgarten's bacillus is not peculiar to syphilitic products, has led him to renounce for the present the proposition that it is the cause of syphilis. Although the microbe of syphilis has not been satisfactorily demonstrated, he concludes that, "after the recent and solid acquisitions which so peremptorily establish the pathogenetic rôle of lower organisms in the domain of infectious maladies, it is hardly permissible for us to doubt that syphilis is also a parasitic malady."

In discussing the specificity of a syphilitic microbe, the experimental attempts made by various observers to inoculate animals with syphilis are passed in review and accepted as yielding only negative results: "In experimentation, as in the histological determination of its microbe, syphilis baffles all our efforts."

Of great interest and importance are the author's observations upon the frequency and chronology of tertiary accidents. Numerous statistics, hospital and private, are analyzed, and the opinions of various authorities are quoted bearing upon this point without enabling him to formulate an absolute percentage. He concludes that the proportion of syphilitics who develop tertiary lesions oscillates between five and fifteen or twenty per cent. In hospital practice the proportion of syphilitics who turn out badly will be perhaps eight, ten, twelve, or fifteen per cent. on the average.

As regards the chronology of tertiary lesions, the epoch of their apparition varies within wide limits from the first year to forty, fifty, or sixty years after the chancre; it is difficult to bring together a large number of statistics and establish an average. In a series of cases quoted the average was about four and a half years. The determinations of a tertiary nature affecting the skin, mucous membranes, and subcutaneous cellular tissue comprise almost half the cases of tertiary syphilis. Of tertiary lesions of the internal organs or viscera, those of the brain and spinal cord are most common. Syphilis of the brain occupies the first rank in frequency as well as in gravity. In the second line, in point of frequency, comes pharyngo-nasal syphilosis in all its

forms. Syphiloses of the liver, lungs, heart, and kidneys are infinitely less common than the preceding, and, with the exception of those of the kidney, rarely precocious. Tertiary osseous accidents have become much rarer than formerly.

In common with most authors, he believes that cases of syphilis characterized by initial mildness or benignity are peculiarly fruitful in tertiary accidents. Among the factors which favor tertiarism he ranks absence or insufficiency of specific treatment as one of the principal causes. On the other hand, he asserts "that a specific treatment, properly instituted and administered according to all the rules which the most skillful practice teaches, does not confer an absolute guarantee against tertiary accidents."

It would be impossible within the limits of our space to give more than a mere outline of the extent and scope of this exhaustive treatise. Although two hundred pages are devoted to the results of anatomico-pathological investigations, the work is essentially a clinical study, the description of the varied and multiple lesions of tertiary syphilis being based upon the observation of not less than four hundred cases, many of which are detailed in full.

The manifestations of tertiary syphilis in the different tissues and organs of the economy are successively described in the following order: 1. The genito-urinary organs, including syphilitic nephropathies. 2. The locomotor system—the bones and articulations, muscles and tendons. 3. The respiratory apparatus—naso-pharynx, larynx, trachea, bronchi, and lungs. 4. The alimentary canal—the buccal cavity, cesophagus, stomach, intestines, peritonæum, the liver and other annexes of the digestive tube, and the ano-rectal region. 5. The circulatory system—the heart, arteries, veins, lymphatics, and vascular glands. 6. The nervous system—the brain, cord, nerves, and organs of sense.

The work concludes with a chapter on Heredo-syphilis, in which the clinical features of the precocious and late forms are described; the syphilogenic capacity of the father and mother, the conditions which influence hereditary transmission, and the many moral and social questions connected with hereditary syphilis are discussed in a scientific manner.

The style and diction of the work are admirable. M. Mauriac possesses the rare faculty of presenting dry details and clinical facts in an original and attractive manner, which enforces the attention and heightens the interest of the reader. We can not too highly commend this elaborate treatise as a faithful presentation of the present state of our knowledge of tertiary and hereditary syphilis.

Manual of Skin Diseases, with Especial Reference to Diagnosis and Treatment, for the use of Students and General Practitioners. By W. A. HARD-AWAY, M. D., Professor of Skin Diseases in the Missouri Medical College, and in the St. Louis Post-graduate School of Medicine, etc. St. Louis: Theo. F. Lange, 1890.

DR. HARDAWAY'S large experience as a teacher and a writer admirably fitted him for the difficult task of preparing a book which, while sufficiently elementary for the student, is yet sufficiently thorough and comprehensive to serve as a book of reference for the general practitioner.

This work, the author informs us in his preface, was primarily undertaken with the view of providing a manual of skin diseases for the use of the students and physicians attending his courses on dermatology; but with the progress of the work it was found necessary, for the adequate presentation of the subject, to enlarge and extend the original scheme. The completed work embraces all essential points connected with the diagnosis and treatment of diseases of the skin, and we have no hesitation in commending it as the best manual that has yet appeared in this department of medicine.

The first part of the work is devoted to a consideration of the general symptomatology, ætiology, diagnosis, and treatment of skin diseases. These subjects are briefly treated, but with sufficient fullness for practical purposes. A commendable feature which we notice in the introductory observations, the convenience and value of which will doubtless be appreciated by the student, is a table giving the elementary lesions which characterize particular diseases, and another indicating the surface or regional distribution of the various diseases of the skin.

The classification recommended by the author is the one which has been adopted by the American Dermatological Association. The first part concludes with a table giving the relative proportion of the different classes of skin diseases based upon the author's statistics, embracing nearly seven thousand cases.

In the second part the clinical appearances, diagnosis, and treatment of the special diseases of the skin are considered. For the sake of convenience and ready reference, the diseases are arranged in alphabetical order. We can not too highly commend this portion of the work, which, from the standpoint of diagnosis and treatment, leaves little to be desired. In the discussion of the subjects numerous foot-notes, containing references to recent and approved authorities, are given, and we note with satisfaction that the contributions of American dermatologists have received full and favorable recognition.

The concluding portion of the work consists of an appendix containing additional formulæ and a carefully prepared diet table.

Wood's Medical and Surgical Monographs. November and December Numbers, 1889; January and February Numbers, 1890. William Wood & Co., Publishers. New York, 1890.

Vol. IV, No. 2.—On the Surgery of the Knee-joint. By C. B. Keetley. F. R. C. S. Aids to Ophthalmic Medicine and Surgery. By Jonathan Hutchinson, Jr. Bacterial Technology for Physicians. By Dr. C. J. Salomonsen.

Vol. IV, No. 3.—A Practical Treatise on Baldness. By George T. Jackson, M. D. The Sphere, Rights, and Obligations of Medical Experts. By James O'Dea, M. D. Pathology and Treatment of Ringworm. By George Thim, M. D. Notes on Dental Surgery. By J. Smith, M. D., LL. D. On Sounding for Gall-stones and the Expulsion of Gall-stones by Digital Manipulation. By George Henley, F. R. C. S.

Vol. V, No. 1.—Neuralgia: its Ætiology, Diagnosis, and Treatment. By W. R. Gowers, M. D., F. R. C. S. The Prognosis of Diseases of the Heart. By Prof. E. Leyden. The Sputum: A Contribution to Clinical Diagnosis, and Practical Examination for Tubercle Bacilli. By Peter Kaatzer, M. D.

Hypnotism : its Significance and Management briefly presented. By Dr. August Forel. The Forms of Nasal Obstruction in Relation to Throat and Ear Diseases. By Greville McDonald, M. D.

Vol. V, No. 2.—Action of Uric Acid in the Causation of Disease. By Dr. A. Haig. Initial Stages of Consumption, their Nature and Treatment. By Dr. Horace Dobell. Ectopic Pregnancy and Pelvic Hæmatocele. By Lawson Tait, M. D.

WE have taken occasion in previous notices of this series of contributions to medical literature to express our appreciation of their value. The subjects are too numerous to admit of separate analysis, and we therefore call attention to the titles of more especial interest to dermatologists.

The development of bacteriology within the last few years has stimulated an interest in this subject on the part of the general physician as well as the specialist. Dr. Salomonsen's monograph on Bacterial Technology, which describes the simplest and most easily managed apparatus and methods for bacteriological investigations, will no doubt find a large field of usefulness.

Dr. Jackson's Treatise on Baldness is a practical and well-written contribution to a subject of universal interest to the profession. Almost every physician is consulted about the treatment of thinning and loss of the hair, and those who have had much practical experience with this class of cases will agree with the author that preventive treatment, embracing the hygiene and care of the hair, is of vastly more importance than curative treatment. The various forms of alopecia—alopecia adnata, alopecia senilis, alopecia prematura, alopecia prematura symptomatice, and alopecia areata—are considered, and the ætiology, pathology, and treatment of these several conditions are detailed at length.

The Pathology and Treatment of Scarlet Fever, by von Ziemssen, though not announced on the title-page, is a valuable contribution and quite worthy of the high authority from which it emanates.

The Pathology and Treatment of Ringworm, by Dr. George Thin, is an admirable presentation of our knowledge of the fungus of trichophytosis, its microscopical appearances, its habitat, the conditions of its development, and the objective phenomena it occasions, as it affects different structures and regions of the body. The pathology, diagnosis, and treatment of the different varieties of ringworm are exhaustively given. The monograph is admirably illustrated by numerous cuts, showing the microscopic appearances of the fungus in the different stages of its development and of the hair structures invaded by the fungus.

Dr. Haig's monograph on The Formation and Excretion of Uric Acid as elucidating its Action in the Causation of Disease will be read with interest by those who attach a large importance to the "uric-acid diathesis" as a pathogenetic factor in diseases of the skin.

Index Bibliographicus Syphilidologiæ. By KARL SZADEK, of Kiew. Hamburg and Leipzig : Leopold Voss.

THE first three numbers of this work comprise the literature of the venereal diseases for the years 1886, 1887, and 1888. The various subjects are classified as follows : 1. General Treatises, Hand-books, etc. 2. Prevention

of Syphilis and the Regulation of Prostitution. 3. The Gonorrhœal Affections. 4. The Venereal Ulcer and its Results. 5. General Pathology of Syphilis. 6. The Syphilitic Infection and the Initial Symptoms of Lues. 7. The Symptomatology of the Early Stages of Syphilis. 8. Visceral and Late Forms of Syphilis. 9. Hereditary and Congenital Syphilis. 10. The Therapy of Syphilis and Mercurialism. 11. Appendix and List of the Names of Authors.

The Index will greatly facilitate the work of writers on the venereal diseases, as it appears to be full and accurate, including even the Russian and Slav literature.

Items.

Eczema excited by the Administration of Borax.—In the *Nouvelle iconographie de la Salpêtrière*, No. 6, 1889, a brief report is given of two cases of eczema provoked by the internal administration of borax for epilepsy. An excellent photogravure illustrates the distribution of the eruption in one of the cases.

The borax was given in doses of two and three grammes for a period of two months.

The eruption was an ordinary eczema, and localized on the lateral aspect of the trunk and on the arms; it lasted for a period of about six weeks in both cases, and only disappeared after the suppression of the drug.

The writers do not think the eruption was alone due to the borax, but only excited by it in two predisposed subjects, as they had both suffered previously with attacks of eczema, and both were affected with seborrhœa of the scalp.

A Combination of Alopecia Areata and Vitiligo.—II. Senator (*Charité-Annalen*, xiv. Jahrgang, 1889, p. 341) reports the case of a type-setter, thirty-two years of age, who, in addition to signs of lead-poisoning (anæmia, loss of weight, weakness of the arms, neuralgia), developed alopecia areata a year and a half previously, after having suffered severely from headache. The disease had caused, in addition to almost complete baldness, a partial loss of the eyebrows, eyelashes, and the beard; the pubic and axillary hairs were not noticeably affected. At the same time spots of clearly defined vitiligo appeared on the front and back of the neck and on the trunk.

No disturbance of sensibility was detected either on the bald regions or on the vitiligo spots.

The Prostate Gland; its Enlargement or Hypertrophy.—In a third paper upon this subject, in the last number of the *Journal of Anatomy and Physiology*, Mr. Griffiths, the assistant to the professor of surgery at Cambridge, arrives at the following conclusions: 1. That enlargement or hypertrophy of the prostate gland results from a growth of the gland tubules with their associated muscle, so as to form new gland substance closely resembling in its structure normal gland. This constitutes the first or glandular stage. 2. That after a variable time degenerative changes set in, which ultimately convert the new tissue into a mass of more or less dense, fibrous, connective tissue, containing only the atrophied remains of the glandular or muscular elements. This constitutes the second or fibrous stage. 3. That no enlargement takes place behind the urethra except when glandular substance exists behind and above the level of the veru montanum in the situation of the "third" or median lobe. 4. That the so-called

"tumors" are not in reality tumors, but merely pronounced localized enlargements of the gland which pass through the same stages as the gland when enlarged as a whole. 5. That true muscular tumors (myomata) do sometimes, though rarely, arise in the substance of the prostate gland, but that they are pathologically different from the ordinary local or general enlargement of the gland.—*The Lancet*, February 15, 1890.

Books and Journals Received.

A Case of Keratosis (Ichthyosis) Follicularis. By James C. White, M. D. Reprint.

Keratosis Follicularis (*Psorospermose folliculaire végétante*). A Second Case. By James C. White, M. D. Reprint.

A Hitherto Undescribed Form of New Growth of the Vulva. By R. W. Taylor, M. D.

Chronic Inflammation, Infiltration, and Ulceration of the External Genitals of Women, with a Consideration of the Question of Esthiomène or Lupus of these Parts. Illustrated by One Chromo-lithograph and Twenty-seven Engravings. By R. W. Taylor, M. D. Reprint.

Primary Melano-sarcoma of the Vulva. Illustrated by Chromo-lithograph. By R. W. Taylor, M. D.

A Case of Molluscum Fibrosum combined with Tumors of the Nerves. By J. F. Payne, M. D. Reprint.

Sclerema Neonatorum. Report of a Case. By William P. Northrup, M. D. Reprint.

An Exanthem after the Use of Rhubarb. By Herman Goldenberg, M. D. Reprint.

Die Therapie der Acne Disseminata. Von Dr. Louis Heitzmann. Reprint.

Notes on Some Forms of Purpura Rheumatica. By William B. Edwards, M. D. Reprint.

A Case of Syphilis in which Several Fingers of Both Hands became Cold and Livid; Suspected Arteritis. By Herman G. Klotz, M. D. Reprint.

Some General Suggestions in Dermatological Therapy. By Samuel Sherwell, M. D. Reprint.

A Malignant Tumor in an Umbilical Sac, with Remarks on the Ætiology of Cancer. By Daniel Lewis, M. D. Reprint.

The Scrofulous Diathesis. By I. N. Love, M. D. Reprint.

A Fatal Case of Varicella Gangranosa. By A. F. Buchler, M. D. Reprint.

Accidents, Complications, and Results following Internal Urethrotomy upon One Hundred and Twenty-one Cases of Stricture. By George E. Brewer, M. D.

Résumé of the Experience of Seventeen Years in Operation of Dilating Urethrotomy. By Fessenden N. Otis, M. D.

The "Perfected Evacuator." By F. N. Otis, M. D.

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No. 5.

Original Communications.

THE SEBORRHOIC PROCESS AND THE EARLY SYPHILITIC ERUPTIONS.*

By R. W. TAYLOR, M. D.,
Surgeon to Charity Hospital, New York.

I DESIRE to call the attention of the society this evening to two cases which present in a striking manner the coincidence of a true seborrhœa developed synchronously with general syphilitic manifestations in patients suffering from an active form of the infection. I am induced to do so by reason of the evidence these cases present in partial substantiation of the views lately put forth by Unna,† who claims the very frequent occurrence of the seborrhœic process with the syphilitic process, and that the existence of the two together is not a mere coincidence, but that in reality a pathological relation exists between them. While I am not as yet prepared to accept in full Unna's wide generalizations in considering as one essential morbid condition all the varied and polymorphous changes included in the general term seborrhœa, I think his investigations are of great value and of much prospective benefit. His simplification and elaboration of the fully developed seborrhœic eczema is really a bold step in advance, and will certainly be productive of simplicity in clinical description and of progress in the matter of therapeutics. While the observation of some cases of what we formerly considered simple seborrhœa has convinced me that perhaps the process was really the starting-point of a morbid condition which eventuated in a true but peculiar eczema, others, on the other hand, have been wanting in symptoms and clinical features which we have from tradition come to look upon as essen-

* Read before the New York Dermatological Society, Feb. 25, 1890.

† Syphilis and Eczema Seborrhoicum. *British Journal of Dermatology*, November and December, 1888.

tial to the eczematous process. In studying these cases, particularly those of the second class, the suspicion has entered my mind that in many seborrhœa may tend to produce eczema by reason only of the *slight* but *continuous* irritation of the vessels of the skin, which Unna lays such stress upon. The subject is on all sides so interesting that it should be carefully studied upon patients as they present themselves. True conclusions can only be reached through careful clinical observation, aided in a measure by reading.

It has seemed to me particularly fortunate that chance has, within a short time, thrown in my way two cases affected with both seborrhœa and syphilis, which present such well-marked features that no stretch of the imagination is required to see in them that pathological relation of the two morbid states or symbiosis which Unna has so cleverly elaborated. While I have seen and am daily seeing many cases in which a more or less mild or severe, limited or extended seborrhœa complicates syphilis, I am not convinced that the interlocking of these morbid processes is so very frequent as Unna is disposed to think.

The gist of Unna's paper is centered in an able presentation of the claim that a pre-existent seborrhœic process is, by reason chiefly of its inherent mild or active hyperæmia, and of its anatomical peculiarities, very commonly the forerunner of syphilitic symptoms, and that the distribution and course of the latter are largely affected by, and may even actually depend upon, the extent, intensity, and course of the former. Unna says: "Wherever secondary syphilis presented itself, I found not only that it corresponded exactly in its distribution, but even in the intensity of the inflammatory symptoms, with the seborrhœic process, and that, in fact, it trod exactly in its footsteps." I am willing to admit this pathological sequence and relationship, but I must add that, with a wide field of observation before me, I have not observed them in this country to the extent that Unna claims they exist. As a corollary of this symbiosis, I think we must admit that in many cases syphilis, particularly in its early and hyperæmic stages, tends to awaken a latent seborrhœic condition, and that the latter may be produced *de novo* by syphilis, probably through its subacute continuous hyperæmia. Further than this, it may be stated without question that such a seborrhœa, excited by syphilis, has much to do in fixing the localization, extent, intensity, and duration of the syphilitic lesions themselves. In other words, that, once fairly started, the two morbid processes go hand in hand in producing lesions which are frankly seborrhœic to the eye, or which appear like amalgamations of seborrhœa and syphilis.

Unna's zeal and enthusiasm in this subject are very commendable, but I can hardly go as far as he does when he states that the papular syphilides, large and small, when covered with yellowish greasy epithelial scales,

are the outcome of a remarkable symbiosis and synergy of seborrhœa and syphilis. This is only true in certain cases. In very many instances, in which I have watched the growth and development of these lesions, there has been no seborrhœic complication whatever until the papules had been fully formed; then, slowly or rapidly, traces of seborrhœa might be observed. To my mind, in cases like these, the growth and vascularity of the papules tended to induce hyperæmia in the coil glands; in other words, a secondary or accidental (not essential) seborrhœa occurred in limited areas in which a syphilitic process was going on. This may seem to be a small point, but at the present time the subject is far from being matured, and it is better to claim too little and then to get more, than it is to claim too much and then have to relinquish a part.

Admitting, therefore, that seborrhœa may prepare the ground for syphilis, let me present my cases which prove that syphilis may be the fore-runner and the excitant of seborrhœa.

M. D., Irish, married, a woman of previous excellent health and fairly good habits, entered Charity Hospital February 22, 1890. Four months ago she suffered from an ulcerated nodule on the inner side of the left labium minus. This lesion was contracted from her husband, who was suffering from secondary syphilis. Toward Christmas the patient noticed that she had grown weak and had lost flesh, and that various tegumentary troubles, to be detailed further on, had become developed. She now suffers severely from nocturnal pains seated in both tibiæ, and has an ulcer on the left tonsil.

Tracing her tegumentary lesions from the upper to the lower parts of the body, we find evidences of both seborrhœa and syphilis; in other words, this case presents in a wonderfully striking manner an interlocking of the seborrhœic and syphilitic processes, or symbiosis. The members of the society, upon examining the case, will find the following varied phenomena:

The scalp shows in a marked degree a true syphilitic alopecia which, beginning in a slight fall of hair, soon developed into a general thinning, which has now nearly laid bare the vertex and occiput and a rim of the lateral portions. The nutrition of the hairs is seen to be much impaired. In these features there is nothing very unusual, though it is not very common to see such a radical alopecia from syphilis.

It must be remembered that previous to infection this woman's hair was thick and strong, and she had not at any time been troubled with dandruff. Besides the alopecia with such a typical syphilitic physiognomy, we find all over the head small and large spots and patches of dull yellowish-red hyperæmia, without sharp outline, and in some places confluent, which are more or less covered with adherent fatty epithelial scales. Some of the older spots present a typical mild salmon-color. In other words, a true picture of seborrhœa capitis may be seen. Moderate

and mild seborrhœa is not an uncommon accompaniment of specific alopecia. On the scalp, therefore, there exists a well-marked syphilitic alopecia complicated with a typical seborrhœa.

At the margin of the hairy scalp we see a well-marked, but irregular, rim of what looks like, and probably is, simple patchy seborrhœa, and which certainly would be thus diagnosed by a competent observer, except for the history of the case. There is no evidence of true syphilitic papules; therefore we must look upon this patch as an aborted or pseudo *corona Veneris*. Upon the forehead, near the temples, the affection is developed in a decidedly ringed form, similar to those we find on the back and over the sternum in uncomplicated seborrhœa.

Upon the nose, at the outer angle of the left eye, and in front of each ear we find small and large patches of seborrhœa, in its typical ringed form, which are of reddish-yellow hue, and which show a decided tendency to heal in the center. Upon the labio-nasal furrow there are irregular patches, and on the upper lip rings of the same character. There is nothing suggestive of syphilis in the foregoing patches and rings except in the sites of the eruption at the scalp margin and in the labio-nasal sulcus.

Upon the lower lip and chin the seborrhoic lesions are most markedly typical, and they present a very striking picture. The lesions are seen to be in the form of dull reddish circles, the margins of which are decidedly elevated and annulated (more so than elsewhere), covered with typical scales and inclosing a yellowish-red, healing, slightly scaling central and somewhat depressed surface. By the fusion of these annular patches we see that festooned outline is produced which has graphically been called "polycyclic." While elsewhere the seborrhoic processes have produced a typical picture of seborrhœa, here upon the chin, though the lesions are also typical in appearance, they, when viewed together with the labio-nasal and *corona Veneris* patches, suggest strongly a syphilitic complication.

In Fig. 1 the alopecia and the patches on the chin are very clearly shown, the whole presenting a very marked appearance. Owing to the rapid involution of the patchy lesions upon the vertex, forehead, and nose, and to their then very light color, the picture fails to show them as they existed when the patient was shown to the society. The appearances presented by the lesions upon the chin may truly be called classical, and they are very suggestive of the disseminated and grouped patches, which, however, lacked the annular outline and sharp margination.

At the occipital scalp-margin there is a diffuse patch of seemingly simple seborrhœa, and on the neck well-marked rings of the same nature.

Scattered over the arms, particularly upon the posterior and outer aspects, we find a disseminated, mottled, declining roseola, typically syphi-

litic in appearance, and over the forearms irregular-shaped, reddish, scaly patches, without much thickening of the skin, which might, with equal propriety, be called seborrhœa or syphilitic papules in the process of absorption and desquamation. In the light of a syphilitic history, we might



FIG. 1.

consider them the result of that form of infection, but in its absence a diagnosis of the simple affection would be warranted.

As on the arms, so on the abdomen we find a typical and striking background of fading roseola, and on the sides of the trunk several well-marked rings of what seem to be undoubted seborrhœa, since they are not distinguishable from the ordinary seborrhœal rings as we find them,

especially between the shoulders. In addition, there are scattered over the trunk deep-red and purplish patches, which may be roseolous, but which I think are the remains of seborrhoic patches, which have lost their characteristic appearance by pressure or friction.

On the outer and anterior aspects of the legs the same symbiosis is observed as we found upon the trunk and arms. In this case we observe in a remarkable degree the coexistence of two orders of lesions—seborrhoic and syphilitic—and I think that the conclusion is fairly warranted that the syphilis provoked the development of the seborrhoic process, since nothing suggestive of it had ever been seen in the patient before the period of syphilitic infection.

In addition to this interesting case, let me call your attention to another, a photograph of which I now present :

The patient is a woman, twenty-six years old, and the mother of three healthy children. She never had any sickness and gives a very clearly negative history as to acne, seborrhœa, or any erythematous condition of the face.

In November, 1889, she presented a hard chancre at the left labial commissure, which was followed by general adenopathy, and later by rheumatoid pains and a general papular syphilide.

The skin lesions upon the face are of most interest to us. A view of the picture presents a marked syphilitic physiognomy. In the middle of the forehead we find a cluster of lesions which can be traced to the glabellar region, around the eyes, over the nose to the labio-nasal groove (with a few outlying ones on the cheeks), on the upper lip, near the nose, and all over the chin from the margin of the lower lip, together with a number on the neck.

Now, careful examination of the eruption showed that it was composed of sharply defined, regular and irregular, round or oval, slightly thickened patches of brownish-red and scaly skin. The scales were of the characteristic dirty-yellow, greasy seborrhœal character, and when removed revealed a shining reddish surface. At the margins of the lesions the loosened scales produced a fringe-like appearance.

To the trained observer in syphilis the picture was so striking that a diagnosis of that disease would be made at once from the peculiar distribution and configuration of the eruption, which Unna calls the “*facies seborrhoica*.” But I can well understand that in the minds of many a doubt might exist as to its nature, and that it might, from the appearance of the lesions themselves, be thought to be an aggravated case of seborrhœa. Others might regard the patches as syphilitic roseola complicated with seborrhœa. Elsewhere upon the body, particularly on the forearms, the eruption was so typical in appearance that it would be hard to mistake it for anything else than a papular syphilide. In this case there was no tendency whatever to the development of the annular form of lesions, nor was there any evidence of seborrhœal symbiosis in the eruption be-

yond the face and neck. It was a marked instance of the patchy form of seborrhœa in the second grade of the process as so truly and admirably described by Unna. Under treatment the affection declined and the scales fell off and left spots of the size of the patches, which were of a typical pale salmon-color and very persistent.



FIG. 2.

Besides these cases of extensive syphilo-seborrhœa, we frequently see, especially about the face, coexisting with the erythematous and the papular syphilide, a few or several patches of seborrhœa, which form but a small and sometimes insignificant proportion of the whole eruption.

These cases certainly show evidence of marked deviation from the

normal standard of development of syphilitic processes, and they warrant the suspicion that, in addition to the specific cause, some other pathogenetic factor was at work. For years we have explained the peculiar features presented by this class of cases with the statement that a seborrhœal process was set up in the portion of the skin involved by the syphilitic lesion, and that it was a simple complication which modified external appearances more or less. Unna, I think, clearly shows that this explanation falls rather short of the real facts of the case. This observer considers these eruptions as mixed infections, due to an interlocking of the seborrhœic and the syphilitic processes. It is, I think, unfortunate that he does not put himself squarely on record as to the nature of the seborrhœic process. From the context of his essays one is led to believe that he thinks it is caused by some micro-organism, but a careful reading fails to reveal a precise statement. H. G. Brooke,* however, who is a staunch admirer and follower of Unna, states clearly his belief in the parasitic nature of seborrhœa.

Whatever may be the primary cause of seborrhœa we can not now state; facts, however, like these already presented clearly show that one of the actions of syphilis, particularly in early hyperæmic stages, consists in the development of a true seborrhœa, which may present a simple seborrhœic physiognomy, or which may be modified by the syphilitic impress and present a somewhat composite appearance. In the cases detailed the seborrhœic process was undoubtedly produced *de novo* by the syphilis, and the result was a symbiosis, or, as Unna tersely calls it, an interlocking of the two morbid processes. It is important to remember that as yet we have only reached the stage of clinical observation, and that a definitive statement concerning these hybrid lesions can only be given after careful and extended microscopic studies have been made.

In other cases it may be found that an antecedent seborrhœa, by reason of its inflammatory processes, predisposes the skin (wherever it exists) to the development of syphilitic lesions—erythematous, papular, or even tubercular. A striking instance of this symbiosis, in which “syphilis treads in the footsteps of the seborrhœic process,” as Unna graphically puts it, is detailed at length in his very interesting paper. I myself have seen several similar and convincing instances of the same combination and sequence. Unna very truly says that “a miliaria rubra can bring about the outbreak of a *small* papular syphilide of the trunk; an accidental attack of scabies may cause a preference for the interdigital folds and gluteal prominences as a place of predilection of the exanthem.” In fact, I may add that almost any simple inflammatory infiltration and con-

* The Relationship of the Seborrhœic Process to some other Affections of the Skin. British Journal of Dermatology, June, 1889.

dition of the skin in subjects of active syphilis may take on a syphilitic nature and behavior.

The especial predilection of early syphilitic eruptions upon the scalp and face to take on a seborrhoeic physiognomy is undoubtedly due to the richness of these parts in sebaceous and sweat glands, and the peculiar arrangement and distribution of the latter are the causes of the configurations of the eruptions, which, from their constancy of occurrence, we have come to term classical.

Finally, I may emphasize the fact that where the seborrhoeic and the syphilitic processes coexist, the lesions may be strikingly seborrhoeic in appearance, or they may present more or less modification due to the specific process.

When the proper cases present themselves I hope to be able to consider this coexistence of seborrhœa in the later stages of syphilis, in order to determine whether there is a true symbiosis, or whether it is an accidental or secondary condition.

THE DERMATOLOGICAL VALUE OF SULPHOLEATE OF SODIUM.*

BY GEORGE HENRY FOX, A. M., M. D.,
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OINTMENTS and liniments have been applied to the skin since the earliest days of medicine, and it seems strange that an experience of so many centuries should have produced so little change in their composition. It is true that the most varied and strange ingredients have been incorporated with them, but until quite recently the base has remained the same—viz., some animal or vegetable oil or fat.

In recent years other bases—such as the glycerite of starch, vaseline, and lanoline—have been recommended and to a certain extent adopted as substitutes for the time-honored lard, but their advantages have been either slight or offset by some objectionable quality.

The sulpholeate of sodium, to which I called the attention of this society a few years ago, is likewise not wholly free from objections, as a considerable experience in its use has shown, but it certainly possesses peculiar virtues which render it of great service in the local treatment of skin diseases.

When sulphuric acid is added slowly to any fixed oil or fat, care being taken to keep the temperature of the mixture below a certain point, a chemical combination is formed, the oleic acid being transformed into what has been called sulpholeic or sulpholeinic acid.

* Read before the New York Dermatological Society, March 25, 1890.
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If sulphuric acid and castor-oil, *e. g.*, be mixed in the manner above stated, the result is a thick, viscid, brownish mass with a strongly acid reaction. The chemical change must take place slowly, and to this end the mixture is kept cool and frequently stirred for about twenty-four hours, or until it is perfectly homogeneous and miscible with water. When the sulpholeic acid thus obtained is combined with an alkaline base we have a clear, thick, yellowish, semi-fluid mass of the nature of a liquid soap. Of the various alkalies, soda has been found to be the most serviceable in combination with the acid, and the preparation of sulpholeate of sodium is in brief as follows: To the viscid mass formed by combination of the acid and oil a solution of carbonate of soda is slowly added under constant stirring and the sulpholeate of sodium is formed. This mixture is allowed to stand for twenty-four hours in a funnel with stop-cock attached, during which time two distinct layers are gradually formed, the upper one being the sulpholeate of sodium, which is at first held in suspension in the liquid like cream in cow's milk. This substance has an acrid, bitter taste and a nearly neutral reaction. Applied to the healthy skin, it has a bland oily or slightly sticky feeling. It contains about thirty per cent. of water, which can be readily separated by evaporation, and the mass then resembles vaseline in appearance and consistency and makes an excellent basis for ointments.

The value of sulpholeate of sodium in the treatment of skin diseases depends upon the following qualities: 1. Its miscibility with water. 2. Its rapid absorption by the skin. 3. Its remarkable solvent power.

The ease with which anhydrous sulpholeate of sodium can be mixed with water gives it an advantage over the fatty substances commonly used for application to the skin. It makes, in fact, a soluble ointment—one which can be washed from the skin as readily as it can be smeared upon it. In cases where it is not desirable to keep an ointment upon the skin both day and night, those made with lard, vaseline, or lanoline as a base are objectionable, since the effort to remove the greasy substance often requires the use of soap and friction, and thereby tends to aggravate an inflammatory eruption. With sulpholeate of sodium as a base, the ointment can be removed from the skin with the greatest of ease by means of a little water or even a moistened rag. In this respect the sulpholeate ointments are unlike any which have been in use save those made with glycerite of starch as a base.

It is this affinity for water which enables sulpholeate of sodium to sink into the skin more readily than vaseline or fatty substances. In regard to the best basis for ointments, there has been considerable discussion, but, in determining this question, the object to be attained by the use of the ointment must be borne in mind. When a simple protective dressing is required for the surfaces of the skin, as, *e. g.*, in a case of acute eczema of an

infant's face, vaseline or its equivalent, the petrolatum of the U. S. Pharmacopœia, will prove of excellent service. But when it is desired to act upon the deeper parts of the skin or to convey medicinal substances into the blood by means of cutaneous inunction, vaseline is far inferior to lard, lanoline, oleic acid, or the sulpholeate of sodium. The latter substance is largely used in the arts as a solvent and vehicle for dye-stuffs. In the process of wool-dyeing it has been found to be of the greatest service on account of its power of penetrating the keratinic tissues. It is this same property which enables it to sink readily into the epidermis and renders it of value in the treatment of various chronic skin diseases.

But the chief recommendation of sulpholeate of sodium is its remarkable power of dissolving certain substances for which we have heretofore had no available solvent. Sulphur, chrysarobin, and other drugs of great value in dermatology have heretofore been applied to the skin in a finely triturated but undissolved condition. Such drugs have therefore exerted their action solely upon the surface of the skin, except when friction has forced them mechanically into the follicles, where perhaps a certain amount of absorption has taken place. The beneficial effects of these drugs thus applied can not be disputed, but when we consider that sulpholeate of sodium will dissolve at least two per cent. of sulphur or of chrysarobin, their increased efficacy can readily be imagined. Other substances commonly used for application to the skin are readily dissolved in any desirable quantity.

There are three forms in which sulpholeate of sodium may be advantageously used in the local treatment of skin disease: 1. As an unguent. 2. As a liniment or liquid application. 3. As a plaster.

As a basis for ointments, the watery element must be removed by evaporation until a suitable consistence is attained. As this process necessarily involves time and trouble, the ointment thus prepared will be more expensive than those made with lard or petrolatum as a basis, and in most cases will possess no corresponding advantage.

As a liniment employed for the purpose of conveying various medicaments into or through the skin, the hydrated sulpholeate of sodium has proved in my experience superior to any substance which we now possess. While it sinks into and softens the skin like glycerin, by virtue of its hygroscopic property, it has the additional and important advantage, already mentioned, of dissolving and carrying various substances with it.

Mixed with gelatin in proper proportions and spread thinly upon muslin, sulpholeate of sodium makes a plaster which adheres readily to the skin when moistened, and is superior in many respects to any which I have heretofore used.

Theoretically, the sulpholeate of sodium is a substance of neutral reaction and perfectly bland when applied to the skin. Practically, it will be

found, especially when carelessly made, to contain a little free acid. It is therefore liable to produce a slight amount of irritation when applied to a delicate or acutely inflamed skin. In the treatment of acute infantile eczema, in which I had hoped for the best results from the use of a *soluble* ointment, I have met with disappointment, but in the use of all stimulating applications I have found the employment of sulpholeate of sodium as a vehicle to be of the greatest service. The sulpholeate of sodium which I have chiefly used during the past few years has been most carefully prepared for me by F. Bague & Co., New York.

CLINICAL NOTES ON SYPHILIS.

By A. F. BÜCHLER, M. D.,

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SYPHILITIC DISEASE OF THE TEMPORO-MAXILLARY ARTICULATION.

INVOLVEMENT of the temporo-maxillary articulation in syphilitic disease is apparently of rare occurrence, for in the perusal of the literature at my command I find but one instance of the affection recorded—that of Voisin, cited by Lang (*Pathologie und Therapie der Syphilis*, p. 382). Yet two examples of this affection have come under my observation.

The first case was that of a robust male patient, aged twenty-eight, whose infection with syphilis dated back to the early part of 1884, and was followed by diverse consecutive manifestations, for which he was treated by eminent specialists both in Germany and France.

On March 28, 1888, he presented himself at my office with an ulcer on the median line of the posterior wall of the pharynx, situated immediately above the *niveau* of the root of the tongue. It was of oval shape, measuring about an inch in length and half an inch in breadth. Its borders were sharply defined, surrounded by a dusky-red zone of mucous membrane, and its floor was covered by a yellowish pseudo-membranous exudate. There was considerable pain in deglutition.

Of the syphilitic character of the ulcer no reasonable doubt could be entertained, and, furthermore, this was confirmed by the rapid improvement which ensued after the administration of the iodide of potassium, of which he received fifteen grains three times a day. With this treatment, and the local application of nitrate of silver, the ulcer gradually diminished in size, and on April 17th had entirely cicatrized.

On September 14th the patient, who during the interval was free from all syphilitic manifestations and enjoying the best of health, was again seen. He now complained of a swelling at the temporo-maxillary articulation, and

his attempts to separate the jaws were attended by considerable difficulty and some pain.

The examination showed that this swelling consisted of an effusion into the joint itself, and, by palpation, pseudo-fluctuation could be obtained. The skin over the articulation was normal; there was no redness or heat, nor was there present any syphilitic manifestation in the vicinity of the joint. On trying to open his mouth, the patient could separate the incisor teeth but an inch. The joint, when at rest, was entirely free from pain. The temperature was normal. There was no history of gout, rheumatism, or exposure to cold. Inunctions of five-per-cent. oleate of mercury over the affected part, and the administration of iodide of potassium, from fifteen to twenty grains three times a day, gradually reduced the swelling, so that the jaws could be separated almost to their fullest extent. Yet there remained some pain and a slight hindrance to the free movements of the joint, which annoyances were, however, entirely removed by an occasional blister and the continuation of the iodide, so that normal functions of the articulation were obtained within five weeks after the onset of the trouble.

In another case, which I had the opportunity of seeing at the German Dispensary, in the clinic under the direction of my esteemed friend Dr. H. G. Klotz, there was a similar condition, involving, as in the first instance, the right temporo-maxillary articulation. Here, however, the affection appeared very early after infection, displaying itself with a generalized macular eruption. On the initiation of mixed treatment, normal conditions were re-established within two weeks.

In a short note, published in the *London Lancet* of August 11, 1888, page 297, Webb reports four cases of gonorrhœal rheumatism of the temporo-maxillary joint occurring in male patients, who were at the time still affected with a gonorrhœal discharge, or had but recently recovered from one.

In two other cases, those of females, where the joint was involved, there was a strong suspicion of the gonorrhœal origin of the affection.

The object in publishing this note is simply to direct attention to the fact that in the aetiology of pathological conditions of the temporo-maxillary articulation, syphilis and gonorrhœa, as in the pathology of joints of other regions of the body, enter as potent factors, and that in the study of the causes of morbid changes of this particular articulation, rheumatism, gout, traumatism, and tuberculosis should not solely be considered to their exclusion.

A CASE OF INITIAL LESION OF THE VAGINA.

On September 19, 1888, J. D. brought to my office his mistress, Mrs. A. E., aged twenty, who for some time had been suffering from a vaginal discharge, from which her lover had repeatedly acquired a slight urethritis, which was always of a short duration, rapidly disappearing after the use of mild astringent injections. Aside from slight irregularities of the menses, the discharge had given Mrs. E. no considerable discomfort.

The introduction of a Ferguson's speculum, besides revealing a cervical endometritis, disclosed the presence of an accident for which neither the patient nor her lover were hardly prepared.

On the right lateral wall of the vagina, about an inch and a half below the cervix, there was discovered a decidedly elevated annular lesion, about the size of a twenty-five-cent piece, which was very painful when the speculum came in contact with it. Its surface, which was bathed by a purulent secretion, presented, after a thorough cleansing, a dusky-red varnished appearance with a slight erosion covered by a grayish-yellow, firmly adherent pseudo-exudate. To the touch it presented a typical cartilaginous induration, such as accompanies the initial lesion of the corona glandis in the male. There was a well-marked polyglandular adenitis of the right inguinal region, while the glands of the left side were in a normal condition.

Although her lover was absolutely free from syphilitic manifestations, and every other exposure to infection was, as so frequently occurs, denied by the patient, no doubt was entertained as to the character of the lesion.

There were no glandular enlargements in other regions of the body, and the skin and mucous membranes were perfectly intact.

The patient was ordered injections of sulphate of zinc, and iodoform powder was dusted on the lesion. Patient was directed to call again within a week; with this request she did not comply, but presented herself on October 17th with a general macular eruption which was very pronounced, especially on the flanks, where it assumed somewhat of a papular character. There was enlargement of the anterior and posterior cervical as well as of the occipital glands. There was no decided change in the chancre, with the exception that it appeared less elevated, its central portion being somewhat cleared up, and its circumference diminished. On October 26th there were found superficial erosions of the lips and the tip of the tongue. The patient was then lost sight of until January 5, 1889, when she was again seen with mucous patches of the tonsils and a papular eruption of the forehead and palms of both hands. On vaginal examination, no trace of the lesion was detectable.

Though the history of the case is somewhat fragmentary, it is interesting in two ways: first, from the comparative rarity of initial lesions of the vagina, and, secondly, from the unusual degree of induration which the chancre presented, it generally being accepted that chancres in this location have a tendency to remain unindurated. An additional point of interest is that, notwithstanding the free leucorrhœal discharge, there was but superficial loss of substance in the chancre itself, and that simply of the erosive type.

ON THE VALUE OF SALICYLATE OF MERCURY IN THE TREATMENT OF SYPHILIS.

In the selection of a mercurial preparation in the treatment of syphilis our choice naturally should fall upon such a one as acts sufficiently energetic to cause a prompt involution of the manifestations without unduly irritating the gastro-intestinal tract or affecting the economy in general.

From the experience which I have gained within the last year, during which time the salicylate of mercury was put to test in thirty-two cases of syphilis, all of which presented the earlier phases of the disease, I believe that this compound answers these requirements in a very high degree. The ordinary dose prescribed was one third of a grain, in pill or tablet form, three times a day; this caused not only a rapid involution of the cutaneous manifestations, but also in a like degree those of the mucous membranes.

In one case of a relapsing circinate papular syphilide of the face and forearm the lesion entirely disappeared after the patient had taken forty-five pills; in a case of papular syphilide of the palms, occurring sixteen months after infection, an equally good result was obtained from fifty pills.

Only in three instances was the course of treatment attended by symptoms of mercurialism. In one case a slight stomatitis was observed after the patient had taken twenty pills, and in two diarrhoea supervened, respectively, after thirty-six and fifty pills.

If comparisons are admissible, it would appear that in its therapeutic action the salicylate bears the closest analogy to the protiodide of mercury, over which, however, it apparently possesses the advantage of being better tolerated by the gastro-intestinal tract. On the other hand, it appears to be slower than the latter salt in reducing enlargements of the lymphatic glands.

Yet, on the enlargement of a physiologically closely allied organ—the spleen—it exerted a very favorable action. In five observations, where, with the onset of secondary symptoms, percussion showed an increased area of splenic dullness, a perceptible diminution in size was noted after the initiation of the course of treatment with salicylate of mercury.

In general, I believe that the claims of Araujo, Szadek, Plummert, and others, of the therapeutic value of the salicylate, can readily be confirmed.

THE USE AND ABUSE OF SOAP AND WATER.

By B. MERRILL RICKETTS, M. D.,

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IT is now about four years since I decided to investigate the cause of a skin affection found almost exclusively among society women or those persons who are fastidious in the care of their skin, especially that upon the face.

That the subject will come within the domain of all interested in the practice of medicine and its results I feel assured.

That all have had the same experience I can not say, for all are not blessed, or, as some would have it, cursed, with a delicate sensitive skin.

The disease referred to is that where the skin is reddened, with more or less scaliness and considerable burning, especially when exposed to either hot or cold draughts of wind. At times it is quite painful, often causing loss of sleep.

I early recognized that it must be due to conditions wholly governable by the persons suffering therefrom. This condition could not be found upon any other part of the body; besides, ninety per cent. of all suffering with it were women in the various walks of life, the remaining ten per cent. being men living under similar circumstances to these women.

The women suffering most are those who wash their faces frequently, at the same time using soap and water with a rough, coarse towel well applied, thereby producing an excess in the exfoliation of the cuticle; in point of fact, so much so that the papillæ many times become exposed and are left to protect themselves by exuding serum which afterward becomes incrustated, thereby being hermetically sealed until the epithelium is replaced.

The epidermis upon the cheek, brow, and eyelids, being thinner than at any other part of the body, is more easily removed. In consequence, then, the application of simple water, with or without a towel, at frequent intervals, means disaster, especially if soap be used.

The skin will burn and itch and feel very uncomfortable for hours, thus giving warning that Nature is being molested and imposed upon in the great effort at cleanliness.

A lady at forty years of age desires to retain the beautiful complexion of one in her teens, especially if she be stimulated by the demands of society. That this desire may be gratified in the extreme, every effort is put forth by using the various cosmetics several times each day, together with a thorough scouring with soap, water, and towel as many if not more times than the application of these nefarious concoctions. Indeed, it is no exaggeration when I say that I have had it stated to me by one who is considered a society belle that she applied Lubin's powder thirteen times within twelve hours, each time applying it after the face had been thoroughly washed with Pear's soap.

Is it not absurd, gentlemen? How long would the leather in our shoes withstand such abuse?

A lady forty-five years of age consulted me two years ago, complaining of an exaggerated reddened, burning, scaly condition of the face which had for years been considered as eczema. She was a lady of temperate habits, good physique, and of superior mind and judgment in the care of her person. The distress she would at times experience was such as to arouse pity on the part of those in company with her.

When told that it would be necessary for her to discontinue the use of soap and water indefinitely, an expression of horror was to be seen. But, upon being assured that complete relief would be the result, she decided to take my advice. I also recommended the use of olive-oil frequently applied with some soft silk or linen fabric. This course has been faithfully pursued until the present time.

She is now well—entirely so—and expresses no desire to return to the use of soap and water.

There were times when the surface of the cheeks and eyelids had the appearance of having had fine glistening scales distributed over them. This, however, was due to the epithelial cells being exfoliated in great numbers after soap or water had been used.

Even in a city like Cincinnati the dirt is easily removed with olive-oil, its use being by far more antique than that of soap.

Ladies of all ages and classes experience the same difficulty due to this morbid desire to possess a beautiful complexion.

It is true that our hands are subjected to the various kinds of dirt and grease, most of which is best removed with soap in some form. The cuticle on the palm being $\frac{1}{8}$ of an inch and on the back of the hands and fingers $\frac{1}{8}$ to $\frac{1}{10}$ of an inch in thickness, is not so easily injured as that upon the face, which varies from $\frac{1}{14}$ to $\frac{1}{20}$ of an inch.

I do not mean to condemn the efforts of persons to look well, for that is the duty of all; but I do seriously object to the ways and means they have adopted. I have made two classifications of those persons who use soap and water upon their hands and faces: *First*, those who are exposed to dirt of various kinds due to occupation or otherwise. *Second*, those who wash and use powder for cosmetic effect.

To the first I would suggest that a good quality of olive-oil be kept on hand and a few drops applied each morning and evening, or oftener if circumstances require. If at any time the dirt should accumulate to a considerable degree, all that will be necessary to remove it will be the free use of the oil, followed by its thorough removal with some soft linen or silk fabric.

To the second class I would say that if they will abstain from the use of water entirely, abandon the use of all cosmetics, and apply olive-oil to which has been added a few drops of carbolic acid, followed by the liberal use of rice powder, they will within a few days notice a marked improvement in their skin, not only in being relieved of those unpleasant sensations, but will also find that it is softer, smoother, and less scaly.

Now, there is a very great difference in the quality of the olive-oil as found in our market of to-day. When I say olive-oil I do not mean the ordinary sweet-oil or cotton-seed oil, or any of the combinations from them.

It is a lamentable fact that not more than one tenth of all the oil purporting to be olive-oil is genuine. Even when genuine, great care should be exercised in its preservation, as, like most oils, it becomes rancid, and when bleached by sunlight the ordinary tests are interfered with. If exposed to the air, the best quality of the oil may become rancid, have a disagreeable smell, sharp taste, a thicker consistence, and a deeper color. Especially is this so if the olive-oil be subjected to heat. The degree of purity can be determined by the degree of concretion, it congealing more rapidly than other oils. The best and most reliable test is as follows: "Six parts of mercury are dissolved at a low temperature in seven and one half parts of nitric acid of the specific gravity 1.35; and this solution is mixed with the suspected oil in the proportion of one part to twelve, the mixture being occasionally shaken. If the oil is pure, it is converted after some hours into a yellow, solid mass; if it contains a minute proportion, even so small as a twentieth, of poppy or cotton-seed oil, the resulting mass is much less firm, and a tenth prevents a greater degree of consistence than oils usually acquire when they concreate by cold."

"All the people were passed clean over Jordan."—*Joshua*, iii, 17.

Water is essential to our well-being; indeed, no form of life could exist one moment without it, from the lowest to the highest of animal and plant life. Even minerals would crumble and cease to multiply or exist if deprived of crystallization, a law so dependent upon aqueous solutions. However beneficial, there is a limit to bathing. Some may be able to indulge to a greater, while others may to a lesser degree. The world has never possessed a class of people who indulged in bathing more than the Greeks and Romans; neither has it felt the influence of a mightier people physically. Baths were common, easily found, and the expense so low that the poorest class of their people could indulge freely in the water of life. Titus, Adrian, and Alexander Severus were frequenters of these resorts, often participating as little children. Thus it is that the rulers of past and powerful nations have set for us the glorious example of general cleanliness. Now how could I be so disrespectful in the way of condemnation of a custom which was at one time considered "a representation of Deity and raised to the dignity of a God"?

It is our duty to instruct the people if we can, as we are in this, as in most things relating to comfort, health, and longevity, their guardians. If we have the power or means at our command to regulate the affairs of state—that is, cause to be enacted laws by which the manufacture and sale of poisons is restricted; if the influence of the medical profession is such as to cause to be erected institutions for the care and preservation of those suffering with physical or mental infirmities—if they, I say, are the prime movers in causing the enactment of regulations upon which the safety of

the people depends in times of epidemics, why should not they be empowered with the control of the manufacture of such an article of commerce as soap has assumed to be?

There have been a few steps taken in advance, and we have reason to think that the better quality of to-day is far superior to that made upon Pompeian principles—specimens of which are now in a most excellent state of preservation in the museums both at Rome and Naples. The factory from which this soap was taken is still in a good state of preservation. Thus it is that we have the assurance of the great length of time that it has been employed. However, soap was known to the Greeks, as shown by the derivation of the word. It appears that it was first used for renovating the various kinds of fabric, especially that of wool, and *not* to cleanse the human skin.

Pliny says that the Gauls were the first to make soap, which was accomplished by mixing ashes with tallow. Although the process of making it has changed but little in the manufacture of ordinary soft soap during all of these years or centuries, it was not until Chevreul (who died in June, 1889, at the age of one hundred and three years) published his researches in 1813 that anything definite was known with reference to the composition of the various fats and oils from which soaps are made. From this date the chemistry of soap-making made rapid advancement, it previously having not advanced beyond the “dignity of an art.”

There are a number of plants—among them the *soap-berry tree*, belonging to the genus *Sapindus*, and the *Phalangium pomaridianum*, of California—the juice of which, when rubbed with water upon fabrics, makes lather, which answers the purpose of soap. The substance is closely allied to the glucosides, and is found in the soap-wort, the pimpnel, the root of the pink, and in many other plants. It may be extracted by boiling alcohol, which deposits it in an amorphous state. On cooling, “saponine,” as it is called, is soluble in water.

Soap is the result of a union of one or more acids obtained from fatty bodies accomplished with the alkalis or oxides, the process consisting in the substitution of the alkali for the radicle of glycerin—the latter combining with the elements of the water to form glycerin. Hence, saponification is the union of alkalis, oils, or fats, be they animal or vegetable, by boiling the latter in solutions of the former—such as the caustic potash or soda—potash making the soft and soda the hard soap. However the process may be, or whatever the material may be from which it is the product, the same principle is involved.

The alkaline oleates, palmates, and stearates, which constitute ordinary soap, are not dissolved in cold water without decomposition, the alkali being dissolved and the fatty acid precipitated. The same action takes place even when hot solutions are cooled.

When soap is used with salt water, the glycerin and alkaline salts remain dissolved, while the solid soap will float upon the surface—a thing which is not so likely to occur with an article made from cocoanut-oil or almond-oil, as they are not so easily separated from salt solutions. This is why they and palm-oil are used in the manufacture of hard preparations, the process of which is accomplished with the soda-ash. Most vegetable oils combined with carbonate of soda will make this quality. The soda carbonate must first be boiled with lime to remove the carbonic acid—a clear solution (*hydrate of soda*) being the result.

In the soft soap, which is principally made from olive-oil, we find an excess of potash, which causes it to be of a brownish-yellow color and viscid. It is a much stronger alkali, for which reason it should not be used for toilet purposes. It is also prepared from animal fats, such as the oil obtained from the seal, whale, walrus, manatee, and the aquatic animals in general. The fact that there is always more or less iodine and bromine found in these oils, especially that taken from the cod, is evidence alone that they should not be used upon the human skin, either pure or converted into soap. There is but little separation, if any, from the water by salt with the soft soap. It is, however, soluble in rectified spirits, and when prepared from olive-oil does not impart an oily stain to paper.

The proportion of water in the ordinary specimens varies from thirty to eighty per cent.; however, the average is about sixty per cent. The soaps made with potash are more soluble, especially those in which the stearates and palmates predominate.

Sodium hydrate decomposes olein into glyceryl hydrate, or glycerin and sodium oleate, or a sodium soap.

The “*sapo durus*,” or hard soap, made from olive-oil and soda, is the ordinary white Castile soap, and made almost exclusively in Marseilles.

There is an article known as *curd* soap, which resembles white Castile in appearance, but quite different in composition and the result obtained. It is a compound of mutton fat with soda, and is not so good.

The green hue given to the Castile soap is due to the addition of green vitriol, and should of itself be sufficient evidence to condemn its use.

Thus it is that any quality containing coloring matter should be condemned, unless it be the wine-colored transparent soap obtained by dissolving perfectly dried hard soap in hot spirits of wine, the strong solution being poured into molds after the greater part of the spirit has been distilled off. The color in this instance is due to the chlorophyl of the fruit from which the wine is made, and is harmless.

The chief adulterations of soap are lime, gypsum, heavy spar, stearate, and pipe-clay, while in the Spanish soaps glue is frequently found—all of which can be detected by dissolving the soap in water, precipitation being the result.

One hundred parts of pure soap dissolved in alcohol should not have more than three parts of insoluble matter, and at least two parts of this should be soluble in water. Then, too, an aqueous solution of soap should remain unaffected on the addition of hydrosulphuric acid.

When there is an acid upon the hand to be removed by washing, soap should not be used until the skin has been thoroughly cleansed with simple water and towel.

The acid combines with the alkali and sets free the oily acid, which, being diffused through the water, gives it a milky appearance.

Metallie salts—such as chloride of sodium, bromide and iodide of potassium, sulphate of copper, iron, nickel, and lead, and all such—will produce the same results. In consequence thereof, soap should not be used until the skin is free from them.

The changes which take place where soap containing stearate of soda is used with hard water or water containing lime or magnesium, are also objectionable in that the lime or magnesium is separated in the insoluble form. Then, too, if the soap obtained by boiling tallow with soda be dissolved in hot water, an oil rises to the surface which concretes into a buttery mass on cooling.

To overcome the disadvantages enumerated in the foregoing paper, I have succeeded in obtaining, with the aid of Professor Karl Langenbeck, what might be called *saponaceous cream*, the two things most important being—

1. The attainment of an absolutely neutral soap containing neither an excess of acid or alkali, especially the latter.
2. One composed of fat or oil not prone to decomposition either before or after saponification.

It has been determined that olive-oil is the best to attain such an end. While cocoanut-oil and palm-oil give more lather, they contain properties conducive to rancidity.

After chemically testing olive-oil and soda, water is added, the result being a saponification into a smooth, gelatinous, opaque, odorless, and neutral mass, which gives but little lather when used with water.

To this is added the fresh albumen of an egg thoroughly incorporated by means of an ordinary egg-beater. A few drops of oil of roses, bergamot, or bitter almonds being added will give to it an agreeable odor.

With this may be incorporated many medicinal agents varying in strength as follows: Ichthyol, 5 per cent.; iodol, 1 per cent.; boric acid, 5 per cent.; thymol, 3 per cent.; sulphur, 5 per cent.; eucalyptol, 5 per cent.; hydrargyri bichloridi, $\frac{1}{2}$ per cent.; tar, 10 per cent.; carbolic acid, 5 per cent. In conclusion, I will say that after one year's experience I can report favorably upon its use.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

197TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Lupus Erythematosus.—DR. ALLEN presented a case of lupus erythematosus with the following history: Mrs. F., aged thirty-eight years, a native of Australia, was first seen in July, 1889, when she presented herself with three areas of the elevated verrucous form of lupus erythematosus covered with wart-like, elevated, horny concretions and crusts. The largest spot had existed for two years, having begun as a pin-head-sized papule and gradually increased at the periphery till at the time of beginning treatment it was over an inch in length and nearly an inch wide. The smaller, a ten-cent-sized spot, had first appeared a year ago, while that upon the brow, about the same size, had only recently shown itself.

The treatment had consisted in multiple linear quadrilateral scarifications, about a dozen sittings having taken place. After each cutting, emplastrum hydrargyrum was applied.

Under this treatment the spot beneath the right eye had been entirely cured for two months, while that beneath the left had only a margin of redness left, which would require one or two more scarifications.

DR. ROBINSON said that he did not consider Dr. Allen's case of lupus cured, as the disease was evidently going on at the margin. The edge was red, elevated, and showed unmistakable evidences that the pathological process was still active.

DR. FOX said that he had given up scarification in the treatment of erythematous lupus, as the results were not satisfactory.

DR. KLOTZ said that he did not consider Dr. Allen's case of lupus cured. He had obtained the best results in treating these cases by the thermo-cautery and afterward applying salicylic-acid plaster.

DR. PIFFARD considered that the lupus on the right side of the face was in good condition, but that on the left was still active. If the patch on the right side remained in its present condition for one year he would then consider it cured, but not otherwise, as lupus sometimes reappeared *in situ* within a year after it was apparently well. He considered lupus erythematosus the most difficult form of lupus to cure. He did not think that scarification yielded better results than scraping or burning. He did not like the term "verrucous" as applied to this form of lupus by Dr. Allen. The verrucous form of lupus vulgaris was not uncommon.

DR. KLOTZ said that he had seen and published a number of cases of the verrucous forms of lupus erythematosus. He considered the verrucous and papillomatous condition a consequence of mechanical irritation that might occur in lupus vulgaris, syphilitic lesions, and even simple dermatites, just as well as in lupus erythematosus.

DR. FORDYCE had seen lupus erythematosus occurring with tubercular phthisis. These cases were interesting, as they might exist only as a coincidence with phthisis, or be connected in some way with the tubercular process.

DR. ALLEN concluded by saying that he considered the term "verrucous" appropriate, as a horny condition was frequently present, as it had also been in the case just presented. The horny plugs might be pulled out, leaving deep patulous openings. He had not presented this patient as cured, but he regarded one patch as well, and the others nearly so.

Pityriasis Versicolor.—DR. SHERWELL presented a case of pityriasis versicolor in a colored boy aged nineteen years, a native of Trinidad, West Indies.

The eruption first made its appearance two years ago. First time he had ever noticed the disease in the colored race. He had presented it to elicit opinion among the members as to its relative frequency.

Lichen Planus.—DR. BULKLEY presented a case showing an unusual phase of lichen planus, with the following history:

Mrs. A., aged fifty-four, first seen December 21, 1889. About three months previously had noticed a soreness of the right side of the tongue, which had increased to the time of the visit, when the whole mouth and tongue was in a raw condition, and eating was very painful. A month or two later the eruption had begun to develop on the wrists and backs of the hands, and this had soon appeared on the lower legs, and had also increased up to the time of the visit and since, in spite of careful and varied treatment. Although the tongue was strongly suggestive of syphilis, there was no confirmatory history, nor had specific treatment the slightest effect on this or the eruption. The peculiarity of the eruption consisted in the size and shape of the lesions, which, beginning as small characteristic lichen-planus points, of which many were yet present, developed to patches of half an inch to an inch or more in size, and of irregular shape. In several places they developed along the line of a scratch.

They also existed on the palms and soles. Both forearms and backs of hands, and also lower legs and feet, were the seat of a very abundant eruption—in some places confluent. The larger patches were quite hard and thickened, and considerably elevated. As some of them developed from a small to a large patch, there would be a hard, almost horny layer formed, firmly adherent, which, however, had at a little distance much the appearance of a bulla; but later the surface would exfoliate in a horny layer, leaving a dry-red surface beneath.

DR. SHERWELL agreed with Dr. Bulkley in the diagnosis of lichen planus. He would like to say in reference to a similarly extensive case of lichen planus, presented to the society at the last meeting, that the lesions had disappeared, but in their place pemphigoid lesions had made their appearance, possibly the result of arsenic given for the cure of the former disease.

DR. ROBINSON said that he had seen several cases of lichen planus like the one presented by Dr. Bulkley. The lesions spread from the periphery with general infiltration like psoriasis; some of the lesions would clear at the center, leaving a slightly atrophic condition.

Eczema and Xeroderma.—DR. PIFFARD presented a case of eczema occurring with xeroderma. He first saw the case two months ago at his clinic. Xeroderma was then present all over the body except the head, which was the seat of an acute eczema. The eczema had now appeared on the face, neck, penis, scrotum, and inguinal regions. The xeroderma was especially marked on the extremities.

DR. BULKLEY agreed with Dr. Piffard in his diagnosis, and he considered that eczema occurring in persons suffering with xeroderma was quite frequent.

Leprosy.—DR. FOX presented a case of leprosy occurring in a boy eighteen years of age. The boy was a native of Mexico, but had been in this country for the past six years. When he left home he had a leprous patch on his right thigh. He had been under treatment in this country for some years, but the disease had gradually developed until he was put on chaulmoogra oil; since then his condition had gradually improved. The pains in the nerves, especially the ulnar, had disappeared; the hearing had improved, and some of the anæsthetic spots were going away. The size of the tubercles had diminished with the internal use of the oil and the external application of resorcin. He had taken about sixty drops of the oil per day, in divided doses.

DR. MORROW said that leprous patients coming to this country from a leprous center were very apt to improve under improved modes of living and the more favorable climatic conditions, and it was extremely difficult to say what precise measure of curative influence should be attributed to chaulmoogra oil in these cases. He had observed a number of cases in which improvement had taken place in a remarkable degree where no internal treatment had been employed. He recalled the cases of three lepers, natives of the Sandwich Islands, that he had seen in the Pest-House of San Francisco. In all these cases a marked improvement had taken place under the influence of hot baths and a simple tonic treatment. Still, he by no means wished to depreciate the undoubted efficacy of chaulmoogra oil in leprosy. In cases where the oil could not be tolerated on account of irritability of the stomach, he believed that strychnine was a most efficient substitute.

DR. BULKLEY reported that one of his cases improved steadily under treatment with *nux vomica* in increasing doses; the enormous quantity of sixty drops, three times daily, was once reached by the patient with benefit to the disease.

DR. ALLEN said that he had used chaulmoogra oil in much larger doses than were generally used, giving as much as three hundred drops a day with benefit. Scarification would most rapidly remove the tuberculous lesions upon the face.

DR. PIFFARD had seen rapid improvement in leprosy from large doses of strychnine, but, as this treatment must be discontinued at times, then the chaulmoogra-oil should be pushed. He believed that both the strychnine and the oil acted as bacillicides, and thus had a curative action.

Topical Use of Sulpholeate of Sodium.—DR. FOX read a paper on this subject. (See page 169.)

DR. PIFFARD said that he had many years ago tried to find a good solvent for sulphur. He had first used sulphide of carbon, but gave it up, as it was

dangerous, being easily ignited, and had a very bad odor. He had afterward used the oleum sulphuratum of the old pharmacopœia, which differed only from that prepared now in boiling the sulphuric acid with the oil and not mixing it cold. As previously prepared, the oil was a good solvent for sulphur, but it made a nasty mixture and smelled badly.

Cutaneous Punch.—DR. PIFFARD showed the society a number of cutaneous punches (different sizes) which were worked by a surgical motor, thus puncturing the skin accurately and causing but little pain without undue pressure being used.

A Case for Diagnosis.—DR. JACKSON presented a case for diagnosis with the following history: A. B., aged five months, male. Up to eight days ago the child was apparently in perfect health, nursing well and retaining the milk. Bowels regular; passages said to be greenish. No history of contagion or of skin disease in the family. The lesions first appeared upon the cheek, and thence spread rapidly, now involving face, arms, and legs. These parts were covered with a large number of discrete tubercular masses that were firm to the touch, about the size of marrowfat peas, raised prominently above the surface of the skin, and surrounded by a red halo. At first glance these bodies looked as if they contained pus, having the white or creamy-white color of a pustule. When they were pricked they gave exit to a thick, semi-solid mass in some cases, to pus in other cases. Many if not most of the tubercles or tumors showed a central punctum. They appeared to run a rather rapid course, as not a few of the tumors were undergoing involution, drying up into a warty mass.

DR. MORROW said he considered the eruption due to the administration of bromide of potassium.

Lupus Erythematosus.—DR. ROBINSON presented a case of lupus erythematosus in a boy aged twenty years. The disease was situated on the back of the neck, had existed seven years, and was now four inches in diameter. When a child four years of age he suffered from variola. Both parents were healthy, but one sister died of tuberculosis at the age of twenty-six years.

Selections.

The Practical Value of Modern Cystoscopy.

PROFESSOR HELFERICH (Münchener med. Wochens., No. 1, 1890), in a contribution to the surgery of the bladder, praises the cystoscope as an aid to diagnosis, and cites many interesting instances where its employment has made otherwise obscure cases clear. He looks upon the Edison mignon lamp as the means of changing the cystoscope from a complicated, technical, difficult, and expensive instrument, at one stroke, into a simple, manageable, and relatively cheap article.

The possession of the cystoscope is not alone sufficient for good results; its use and management must be learned thoroughly, and practice must be

had upon the cadaver before an attempt is made on the living or the instrument is employed in pathological cases.

One great value of the method lies in the use which can be made of it in early diagnosis of kidney disease. Of all the aids which we possess to this end, none is so simple and good as this direct observation of the stream of urine as it flows from the opening of the ureter into the bladder.

Its employment in the detection of calculi and tumors is illustrated by cases, and the standpoint is taken that no lithotripsy operation should be considered ended and the cure completed before the cystoscope has been used on one or more occasions to demonstrate the healing of the bladder.

Cystoscopy is considered indispensable in treatment by lithotripsy, and the author thinks that it is superior to all other means of examination of the bladder after the median operation of lithotomy.

It was considered at the time a good result when Thompson was enabled to make a diagnosis twenty-nine times in forty-three cases by his method (twenty cases being tumors of the bladder), but now Fenwick gives a list of forty-three cases, in forty-one of which the diagnosis was made possible by the cystoscope. Besides, it is harmless compared to an operation, and free from all the disagreeable consequences. No physician should attempt to ignore its worth, and if not in a position to possess and master the instrument himself, he will find satisfaction in securing an examination by one experienced, so that early diagnosis may be made and successful treatment begun.

Bacteriological Investigations regarding the Intervention of Microbes in the Genital Complications of Gonorrhœa.

M. ÉRAUD read a paper before the Medical Society of Lyons (Séance du 3 février 1890) giving a *résumé* of his bacteriological researches concerning some of the genital complications of gonorrhœa. He studied successively the microbe found in orchitis (epididymitis), in prostatitis, in the urine of patients with gonorrhœa, and a microbe found among the parasites of the normal urethra.

He obtained, by means of a sterilized pipette through a puncture into the tunica vaginalis of a patient affected with gonorrhœal epididymitis, a little serous fluid, with which he succeeded in obtaining cultivations in sterilized bouillon, on gelatin, and on agar-agar. The microbe obtained was a diplococcus, occurring sometimes in chains and sometimes in masses, and which was only partially discolored by the method of Gram. Injections of the bouillon cultivations under the skin of *cobayes* gave rise to no abscess; the animals so inoculated died within from eighteen to twenty-five days without presenting any lesion at the autopsy. The injection of a cubic centimetre of the bouillon cultivation, two days old, into the testicle of a dog produced an orchitis which was very painful during two days and then disappeared during the following week.

With the pus of gonorrhœal prostatitis M. Éraud obtained cultivations in bouillon, on gelatin, and on agar-agar of colonies of white, red, and yellow color, among which he found the same coccus as in the preceding experiments. Injected into the peritoneal cavity under the skin and in the urethra

of *cobayes*, it killed the animals by septicæmia; injected into the testicle, it produced orchitis.

With the cloudy urine from various cases of gonorrhœa, in its different stages, cultivations were obtained and inoculations made with the same results as in the former experiments. Identical results were also obtained by inoculating the cultivation media with the secretion from the urethræ of boys who had never been affected with gonorrhœa.

By reason of the results of the recent investigations concerning mixed infection, one might suppose that the microbe found in epididymitis, prostatitis, etc., was only rendered active under the influence of the gonorrhœal poison. To test this influence the author added to his cultivation medium a liquid obtained from gonorrhœal pus containing only the soluble products of the gonococci, but free from the organisms themselves. In this new medium the results obtained were the same as before; the orchitis produced experimentally differed in no respect from that produced by the simple cultivation. To establish an analogy between these diverse microbes on the one hand, and the gonococcus on the other, M. Éraud endeavored to obtain a cultivation of the latter, and believed that he had been successful. The pus from a recent gonorrhœa, implanted on agar-agar and submitted to a temperature of 35° to 38° C. for three days, produced a colony which, transported on gelatin, gave rise to a cultivation which did not liquefy the latter medium. The cultivations developed equally well on gelatin. Examined under the microscope, they were composed exclusively of diplococci of a striking resemblance to the gonococci themselves.

Injected under the skin of *cobayes*, the microbe produced no pus; it killed the animals by septicæmia without appreciable lesion: injected into the testicle, it produced orchitis. Finally, as in all the other cases, it was incompletely discolored by the procedure of Roux.—*Lyon médical*, 9 février 1890.

Inflammation of the Seminal Vesicles.

M. HORWITZ (Wiener med. Presse, 1889, Nos. 33 and 34) discusses the foregoing subject. Primary acute inflammations of the seminal vesicles are very rare: the affections are mostly of secondary nature. Among the causes are acute and chronic gonorrhœa, strictures of the urethra, tuberculosis of the prostate and bladder, malignant tumors, infiltration of urine, and pyæmic and septicæmic processes. In gonorrhœa, spermato cystitis is of much more seldom occurrence than inflammation of the neighboring parts; it occurs in acute gonorrhœa of the posterior urethra, or in acute exacerbations of chronic gonorrhœa. Its symptoms are fever, spasmodic pains extending from the perinæum to the urethra and bladder, painful urination, and painful erections. During the violence of the spasmodic pains a contraction of the perineal muscles takes place, expelling a thick, cloudy fluid consisting of spermatozoa, pus-corpuscles, and epithelial cells. Examination *per rectum* reveals a painful swelling of the organs. All of the symptoms given are more certain indications of the existence of the trouble when at the same time an epididymitis is present. The prognosis is favorable; in severe cases the discharge may be mixed with blood. The treatment consists in long abstinence from sexual intercourse, cold applications to the perinæum, and the

use of laxative medicines. In the most severe cases suppuration of the seminal vesicle results, implicating the prostate and the ampulla of the vas deferens; general infection may result.—*Centralblatt f. klin. Medicin*, No. 13, 1890.

Psorosperms in Paget's Diseases.

At a recent meeting of the Pathological Society of London, J. Hutchinson, Jr., showed specimens illustrating the presence, in what was known as Paget's disease of the nipple, of psorosperms or coccidia. The parasite, of oval or rounded shape and one thirtieth of a millimetre in length, was found in the thin layer of the epithelium which covered the florid surface of the diseased patch of the skin. Each coccidium had a shell which on section presented the appearance of a double contour or outline. Often a small knob or aperture at one end, the mycropyle, could be distinguished. In the interior one or more globular or globose masses were to be seen, and sometimes the psorosperms might be made out. In the coccidium oviforme of Leuckart each coccidium developed from psorosperms inside the shell, which subsequently became free. Mr. Hutchinson believed that he had detected these among the epithelium cells. The case from which the specimens were obtained was a woman, aged forty-six, who for four years had a patch of inveterate eczema around the nipple, measuring four inches in diameter. The development of a scirrhus in the breast led to the removal of the latter. M. Darier, who discovered the parasites in cases of Paget's disease in 1889, pointed out that the easiest method of demonstrating them was to scrape the surface and to treat the scrapings with iodine solution or bichromate of potash. The best way, according to Mr. Hutchinson, was to soak the scraped epithelium with liquor potassæ, and to mount it in glycerin jelly. By this means the coccidia were differentiated, and their number could be estimated. Using a $\frac{4}{5}$ " power, as many as one hundred coccidia were counted in a single field. A case of eczema around the nipple, in which the skin became affected subsequently to the development of cancer, was examined for the parasite, with negative results. Attempts at inoculation on animals had hitherto failed. The parasite which produced Paget's disease of the breast appeared to be precisely the same as that infesting the liver or intestines of rabbits, mice, etc.

One or two similar instances had been observed in men. Mr. Eve had demonstrated them in the ureters in one case, and it was possible that some supposed examples of cancer of the liver might be due to the same cause. In the discussion which followed, Dr. Crocker said that in the case of Paget's disease of the scrotum, which he had described in the last volume of the society's Transactions, he had since found psorosperms in abundance.

Dr. Delépine had been working on psorospermia for six months, and he had no doubt that the specimens shown were of that nature. He had recently examined a case of carcinoma extending along the bile ducts, and in many of the nodules he had found psorosperms.—*London Lancet*, March 29, 1890.

Asepsis of Instruments employed in the Urethra.

DR. PICARD writes in the *Gazette des hôpitaux*, No. 28, 1890, upon the important and practical subject of asepsis of catheters and sounds before they are passed into the urethra and bladder. He considers, first, the question

whether it is always a necessary thing, and the dangers to which its neglect may give rise ; and, secondly, by what means the asepsis may be best and most easily brought about. The first proposition is considered incontestable. Although catheterism may be practiced, it is acknowledged, for a long time without special precautions, and no ill consequences follow, still this fact should not produce the idea of absolute innocuity. It has been too much the custom to attribute to the pre-existing disorder the catarrh of the bladder, the urethritis, or the orchitis, which follows at times the passage of a sound. When such an orchitis has been acknowledged as due to the operation, and even called, as it has been, *orchite du cathétérisme*, the fact was recognized, but not explained. If an abscess of the prostate supervened—a rare accident—it was admitted that the irritation produced had been too great. All of these conditions, once thought to be due to mechanical action, the author believes to depend upon sepsis.

The general complications which appeared in the course of catheterism were still less well understood ; the urinary fever in its varied types—that of acute frank access, similar to the access of an intermittent, or the slow fever of the continuous fever type—was attributed to resorption of altered urine, or by another theory to a reflex congestion causing arrest of the renal secretion. Neither gave the key to the question, while each seemed to possess some truth. There is, however, no doubt that all of these accidents have for cause infection of the urinary tracts, and are due to want of cleanliness of the instruments employed. The axiom is given that *a clean aseptic sound, no matter how often employed, never occasions purulent cystitis, urethritis, orchitis, urethral abscess, or urinary fever*. To this should be added, provided the urinary tract be not previously infected.

Respecting the means to be employed to secure the asepsis, the author confines himself to those easily secured by the general practitioner. Metallic instruments are most easily disinfected. Boiling in simple water or in salt water is regarded as giving practically the necessary guarantees. Boiling in strong carbolized water is preferable but often impracticable. Soft or semi-soft instruments are more commonly employed and require greater care. The soft, red caoutchouc sound, called after Nélaton, which is the most extensively employed, is one easily disinfected and kept rigorously clean. It may be dipped for a few seconds into boiling water or it may be kept constantly in a strong antiseptic solution, such as a five-per-cent. phenic acid or a 1-to-1,000 sublimate solution. It is recommended to wash the sound, thus kept in strong antiseptics, before using, either in boiling water or boric-acid solution. After boiling, the instrument may be taken up in a clean forceps and placed in a jar containing a saturated solution of boric acid. A thread previously fastened in the end of the sound is slipped into a slit in the cork and the sound is thus suspended and can be readily withdrawn without handling when needed. Semi-soft gummy catheters and sounds are not so easily sterilized. They should be placed in tubes whose open extremity is then filled with absorbent cotton. The tube is then placed in boiling water and allowed to remain for half an hour, keeping the interior of the tube at 100° C. During this time this heat will sufficiently sterilize the tubes. It will be more prudent to repeat this process several times at intervals of

twenty-four hours, for while this temperature destroys adult bacteria it is without effect upon the spores. The sounds can be sterilized by placing in a tube in boiling water.

The hands of the physician should be thoroughly cleansed and rendered aseptic. The meatus and glans penis of the patient should be washed in a sublimate solution or with hot water. If the urethra is already infected it should be washed out with a saturated solution of boric acid. For lack of these precautions a more or less acute cystitis has been again and again set up.

Gummatous or Tertiary Lymphoma.

DR. LUSTGARTEN (Medical Record, January 11, 1890) relates a number of cases of subcutaneous glandular affections in the late stage of syphilis, which condition he thinks presents considerable difficulty of diagnosis because of the clinical resemblance to malignant tumor, especially to malignant lymphomata and to scrofulous glands. The author quotes Esmarch to the effect that "a great part of the new growths which are generally called sarcomata and extirpated, belong in reality to the syphilomata." The inguinal glands have been found most frequently affected; next come the glands of the front of the neck, while the cervical, axillary, and cubital are more rarely implicated. The gland mass presents an uneven nodular surface as a rule, while caseous degeneration and fluctuation may occur. These tumors may exist as the only manifestation of syphilis, and all history may be wanting, as illustrated in the author's cases.

Bacteriology does not aid much in diagnosis since the demonstration of bacilli in glandular pus does not often succeed.

By energetic antisyphilitic treatment these cases are cured, while if this treatment is neglected a subsequent malignant development may be encouraged.

On the Development of the So-called Strumous Bubo and the Indications for their Early Extirpation.

DR. H. G. KLOTZ had occasion, during ten years of service in the German Hospital of New York, to observe a large number (not less than one hundred and twenty) of cases of strumous bubo, and to remove some of them during the early stages. Contrary to the general opinion, as sustained by Bumstead and Taylor, Zeissl, Lang, etc., he finds that, as a rule, the strumous bubo has nothing to do with syphilis, tuberculosis, or scrofulosis, but occurs on individuals who have previously enjoyed perfect health and sound constitution, and continue to do so just as well after the removal of the bubo. Some of the patients were syphilitic, and one was tuberculous, but in their cases the development, course, and final result did not show any peculiarities, and were not influenced by the prevailing general disease or by specific treatment. Strumous bubo makes its appearance in connection with very slight lesions: abrasions, herpes, chronic gonorrhœa; sometimes without any apparent lesion; it was never observed after typical soft or indurated chancre.

The symptoms which accompany the development of the bubo from the early beginning to the formation of the well-known large tumors, their de-

struction, formation of fistulae, etc., following in their wake are minutely described, as well as the pathological processes in the glands.

It appears that the characteristic features of the affection are the following:

1. The simultaneous affection of all the ganglia of a certain group (Auspitz, Bumstead and Taylor).
2. The early formation of miliary foci of pus in the affected glands (Culver), and gradual coalescence into larger abscesses.
3. The early and firm attachment of the whole group to the underlying tissues, while the skin remains movable and intact.
4. The coalescence of the entire group into one single circumscribed tumor.
5. The occurrence of thickened and enlarged lymphatic vessels.
6. The secondary affection of symmetrical groups of ganglia or of others in the neighborhood—femoral, deep inguinal or iliac, and hypogastrical (Oedmansson).
7. The early deterioration of the general health, entirely out of proportion with the local conditions in the early stages.
8. Last, but not least, the regular and simultaneous occurrence of all the symptoms enumerated.

On the strength of these observations, and of the severe character of several cases, Klotz, although unable to furnish microscopical evidence, feels convinced that the affection is due to the resorption of septic matter, probably of some kind of cocci. It seems, therefore, advisable to restrict the name of strumous bubo to the rare cases of real tuberculous glandular affections, and to adopt a new name more in accordance with the pathological facts—for instance: aggregated septic bubo, or septic bubo “en groupe.”

Experience having taught him the inefficiency of treatment generally applied to prevent the formation of large tumors, etc. (including ice, poultices, iodides, parenchymatous injections of carbolic acid, etc.), Klotz strongly advocates the thorough removal of the affected group by extirpation as early as possible, saving time and general health, affording a chance for a quick recovery, and avoiding all the dangers and difficulties, on account of which other authors abhor operative interference. The difficulties of the extirpation increase with the duration of the affection. Its only danger is the nearness of the large veins, particularly of the vena saphena magna, which may be closely attached to or completely imbedded in the mass of glandular tissue. The wounds, in uncomplicated cases, healed in four to six weeks, seldom followed by oedema of the scrotum or of the extremity; gangrene of the scrotum was never observed. Death occurred twice—once from erysipelas and once about ten days after operation, from hemorrhage of the femoral vein, owing to corrosion by a strong solution of chloride of zinc.—*Berliner klin. Woch.*, 1890, Nos. 6–8.

The Curative Effect of Erysipelas in Malignant Tumors.

DR. KLEEBLATT (Münchener med. Wochens., No. 7, 1890) narrates his experience concerning the influence exerted by erysipelas, whether occurring in a natural way during malignant disease, or artificially produced as a therapeutic measure. Three personally observed cases are added to the hitherto sparse literature of the subject. Ricord and Deprès had already carried out

inoculation experiments, following the observations which had long before been made on the beneficial effects of erysipelas when spontaneously developing. Busch had also obtained astonishing results in Germany. Fehleisen reported seven cases of erysipelas inoculation in malignant tumors after obtaining pure cultures, and thus securing a sure inoculation material. Janike also records an inoculation, and Bruns has written upon the subject.

In the first of the author's cases there was a lymphosarcoma of the tonsil, which was operated by Czerny, in Heidelberg, and recurred within a few months in the glands of the neck, etc. Several months later an erysipelas occurred, and was followed by some improvement. Some three months later an inoculation with Fehleisen's erysipelas cocci was made, which resulted in a marked outbreak of the disease after two days, lasted about a fortnight, and was followed by decided improvement for a time; but three months later death occurred.

In the second case, which was also a lymphosarcoma, beginning behind the ear, in a fifty-two-year-old man, an inoculation was made, and within two days resulted in an erysipelas with bullæ. As it subsided the growth disappeared, and up to the date of the report there had been no recurrence.

The third case was one of lymphadenoma upon the lower eyelid of a twenty-one-year-old girl, in which erysipelas of the face occurred, and reduced the size of the tumor one half. A second attack of erysipelas caused it to wholly disappear, and there was no recurrence. The interesting question is left unsettled as to whether the erysipelas exerts its good influence by the cocci finding their way into the growth, and by their increase causing destruction of cells by direct action upon them, or, considering that sarcoma as well as carcinoma is of microbial origin, that there takes place a contest between the two varieties of microbes, in which the erysipelas cocci come off victorious and the cellular elements of the growth perish in consequence. The author considers, in view of the results obtained by himself, that inoculation of erysipelas is justifiable in cases where total extirpation of a malignant growth can not be accomplished early.

Latent Chronic Gonorrhœa in Man.

DR. ERNEST FINGER, in an article which is concluded in No. 7 of the current *Wiener mediz. Wochens.*, says we have three forms of chronic blennorrhœa :

1. The recent forms, in which, along with the circumscribed areas of disease, there are still more extensive surrounding tracts of congestion and passive hyperæmia, with softening, swelling, and hypersecretion of the mucous membrane. These forms show themselves in the urine, being clouded by mucus and containing gonorrhœal threads.
2. Older circumscribed forms with gonorrhœal threads in clear urine, but in which the changes are superficial, and have their seat only in the mucosa.
3. Similar forms in which, however, the changes go deeper and affect the mucosa, submucosa; in the pars anterior, a portion of the corpus cavernosum; in the pars posterior, the prostata, the caput gallinaginis, and the prostatic glands.

According to the form and location thus indicated, the author lays down certain precise indications for treatment.

I. In the first form we have the concomitant catarrhal symptoms to combat, and hence apply directly to the diseased parts dilute, weak astringent solutions. First of all, the catarrh is to be cured, then the deeper areas will alone remain.

II. In the second form of circumscribed mucous areas of disease we must resort to strong astringents and caustics applied to the most limited regions possible.

III. In the third form we have, along with the superficial indications to meet, a deep effect which must be produced by pressure and resorbents. When the catarrhal inflammation of acute urethritis affects the posterior part of the canal the whole urethra must be washed out. For this purpose the author prefers Diday's irrigation to Ultzmann's irrigation catheter.

Diday's method consists in passing a Nélaton catheter into a partly filled bladder and, when the urine begins to flow, to gently withdraw the instrument until the flow ceases. The eye of the catheter lies then in the posterior part of the prostatic portion. A syringe is now filled with the astringent to be used (preferably warmed) and the nozzle inserted in the external end of the catheter, and as the latter is slowly drawn out the lotion is injected. For this purpose permanganate of potash (1 to 5,000), sulphocarbolate of zinc (1 to 5,000), or nitrate of silver (1 to 1,000), may be employed and renewed every second or third day. The secretion of the mucous membrane will disappear, but the urine will still contain flocculi, and we have the second form before us. The localization of the diseased part can be determined by the sound, which always produces pain in the same point, located in the bulbous or prostatic part. The indication is to apply remedies exactly to the affected area. Nitrate of silver and sulphate of copper can be used in from $\frac{1}{10}$ to 10 per cent. solution.

Lanoline salve is highly recommended as not being so readily washed away with the act of urination.

He uses creolin, 1 to 3 ; or nitrate of silver, 1 to 3 ; or sulphate of copper, 1 to 5 parts ; lanoline 95, and olive-oil 5 parts. This is applied every second or third day by means of a Tommasoli syringe. In the third form Otis's sounds Nos. 24 to 30 are recommended left in the canal from five to fifteen minutes, followed by the above-mentioned astringent lotions or salve, or the following :

R Kali iodidi.....	5·0;
Iodi puri.....	0·5 to 2·0;
Aq. dest	100·0.

The value of the endoscope, whose worth is unquestioned, is not discussed.

Aristol in the Treatment of Psoriasis.

DR. SCHIRREN (Berliner klin. Wochens., No. 11, 1890) has experimented with this new product of the chemist in the treatment of psoriasis, and has observed its effects upon ten cases.

Aristol is a thymol iodide, which precipitates as a reddish-brown amorphous powder when a solution of iodine in iodide of potassium is added to an

alkaline solution of thymol. Aristol has been found harmless, without toxic qualities, and is efficacious in psoriasis, though of slower power than other drugs now employed.

It is not a specific against all skin diseases, as it has been vaunted to be in the trade, but has a certain worth in some of them, including psoriasis. Eruptions of various forms of psoriasis, and of long or short duration, are caused to disappear under a ten-per-cent. salve.

Book Reviews.

Practical Electricity in Medicine and Surgery. By G. A. LIEBIG, JR., Ph. D., Assistant in Electricity, Johns Hopkins University, etc., and GEORGE H. ROHÉ, M. D., Professor of Obstetrics and Hygiene, College of Physicians and Surgeons, Baltimore, etc. Profusely illustrated. Philadelphia and London: F. A. Davis, Publisher, 1890.

AMONG our therapeutical resources it may be said that none has been so little understood yet so indiscriminately employed by the profession as electricity. Many medical men make extensive use of this agent without understanding the mechanism of the apparatus employed, the elementary principles of electrical action, or the indications for its use. A work, therefore, which proposes to give an intelligible account of the science of electricity, and to set forth the fundamental principles involved in its application to medicine and surgery, is much needed.

The work before us is divided into three parts. The first part opens with an exposition of the science of electrical forces, which bears the impress of a thorough knowledge of the subject, but which is perhaps too technical to be readily intelligible to the average practitioner. The various forms of electrical and magnetic apparatus available for medical and surgical purposes are then discussed, with suggestions as to the adaptability of the different batteries to particular kinds of work, and the best methods of caring for such batteries. There is also given a description of the electric motor, the telephone, and phonograph, the authors maintaining that such appliances are continually becoming, as time goes on, of more value to the physician either in the treatment or diagnosis of disease.

In Part II the effects of electrical currents upon the tissues and organs of the body in health and disease are described and contrasted, and the methods indicated by which the modifications determined by disease may be utilized for diagnostic purposes. This part concludes with a chapter devoted to a consideration of the methods of applying the electric current for therapeutical purposes.

Part III considers the general therapeutic effects of electricity, the diseased conditions in which it is indicated, and the modes of its application in the treatment of diseases of the various organs. Particular attention has

been given to the applications of electricity in gynaecology, the diseases of the male genito-urinary organs, and in diseases of the skin.

The book is well printed on good paper in large, clear type, and admirably illustrated with numerous well-executed cuts. It will no doubt receive, as it deserves, a favorable recognition from the profession.

Essentials of Diseases of the Skin, including the Syphilodermata, arranged in the Form of Questions and Answers, prepared especially for Students of Medicine. By HENRY N. STELWAGON, M. D., Ph. D., Attending Physician to the Philadelphia Dispensary for Diseases of the Skin, etc. With Seventy-four Illustrations. Philadelphia : W. B. Saunders, 913 Walnut Street, 1890.

The Examination of Urine, Chemical and Microscopical, for Clinical Purposes, arranged in the Form of Questions and Answers. By LAWRENCE WOLFF, M. D., Demonstrator of Chemistry, Jefferson Medical College, etc. Colored Plate and Numerous Illustrations. Philadelphia : W. B. Saunders, 913 Walnut Street, 1890.

Essentials of Gynaecology, arranged in the Form of Questions and Answers, prepared especially for Students of Medicine. By EDWIN B. CRAGIN, M. D., Attending Gynaecologist to the Roosevelt Hospital, Out-patient Department, etc. With Fifty-eight Illustrations. Philadelphia : W. B. Saunders, 913 Walnut Street. London : Henry Renshaw, 1890.

THE object aimed at in this series of question compends is to present the essential facts and principles relating to the different subjects in a compact yet exact and definite form. The effort to condense the subject-matter of voluminous works within narrow limits is by no means an easy task. The sententious style of expression necessarily adopted is not always compatible with lucidity, clearness is apt to be sacrificed to conciseness, and important points are often omitted. Much depends upon the capability and experience of the compiler. An examination of the manuals before us can not fail to convince one that the authors have done their work in a satisfactory manner.

The *Essentials of Diseases of the Skin* is an admirable compend of our knowledge of dermatology. Dr. Stelwagon's experience as a teacher has enabled him to formulate questions covering all essential points, while the answers are comprehensive, with sufficient accuracy of detail to be thoroughly intelligible. Of especial value and completeness is the therapeutical part of the work.

In *The Essentials of Examination of the Urine*, Dr. Wolff has given an account of the normal and pathological constituents of the urine, and a *résumé* of the recent and most improved methods for its chemical and microscopical examination. The importance of a knowledge of urinalysis and urinalysis to the student of dermatology and genito-urinary diseases can not too strongly be insisted on.

The *Essentials of Gynaecology*, by Dr. Cragin, embraces many morbid conditions of much interest to the specialist in cutaneous and genito-urinary diseases, as the skin diseases affecting the vulva, new growths of the vulva, the various forms of vulvitis, vaginitis, urethritis, endometritis, salpingitis, ovariitis, etc., which occur as sequelæ of gonorrhœal inflammation.

The Neuroses of the Genito-urinary System in the Male, with Sterility and Impotence. By Dr. R. ULTMANN, Professor of Genito-urinary Diseases in the University of Vienna. Translated by GARDNER W. ALLEN, M. D. Philadelphia and London : F. A. Davis, Publisher, 1889.

DR. ULTMANN'S monographs, *Ueber die Neuropathien (Neurosen) des männlichen Harn- und Geschlechtsapparatus* and *Ueber Potentia generandi und Potentia coeundi*, have been recognized abroad as among the most valuable and scientific contributions to our knowledge of these subjects, and in bringing them to the notice of the profession of this country through the medium of Dr. Allen's admirable translation, the publishers have done an excellent service.

In the consideration of the neuroses of the urinary and genital organs, these affections are divided into three distinct groups, accordingly as they affect sensation, motion, and secretion. The ætiology and symptoms of these various conditions are described in a clear and concise manner, while the treatment is given more in detail.

The second section is devoted to sterility and impotence. There is no class of disorders which are so inadequately treated of by text-book writers as those of the genital system, and perhaps no class of patients so difficult and unsatisfactory to treat as those suffering from derangements of the sexual functions. A false sentimentality often prevents a full and frank description of symptoms on the part of the patient, and too often these symptoms are referred by the physician to the domain of sexual hypochondriasis, and little in the way of sympathetic advice or intelligent treatment is given. As a result, this class of sufferers furnish a rich harvest for quacks and pretenders.

The various factors concerned in the production of sterility and the several forms of impotence are studied by Dr. Ultmann from a scientific standpoint, and the therapeutic hints and suggestions as to the management of these often difficult and refractory cases are eminently sound and practical.

Die Litteratur über die venerischen Krankheiten von dem ersten Schriften über Syphilis aus dem Ende des fünfzehnten Jahrhunderts bis zum Jahre 1889. Systematisch zusammengestellt von J. K. PROKSCH in Wien. Erster Band, allgemeiner Theil. Bonn: Verlag von Peter Haustein, 1889.

THIS catalogue of the literature of venereal diseases, from the first writing on syphilis toward the close of the fifteenth century to the year 1889, forms the first of a series. The completed work will embrace three volumes. Volumes II and III will contain the special literature of the three venereal diseases—gonorrhœa, chaneroid, and syphilis—in proper subdivisions, and will be issued in the course of the year 1890.

A glance at this first volume, containing nearly five hundred pages, will impress any one with the vast number and variety of the contributions which have been made to the literature of venereal diseases within the past four hundred years. While few have any conception of the immense labor and research involved in the compilation of a complete bibliography of venereal literature, yet all will appreciate its great value and usefulness as a work of reference. The work is most admirably and systematically arranged—each title under the appropriate heading, so as to facilitate ready reference.

Items.

Atypic Zoster Gangrænosus and Zoster Hystericus.—Kaposi (Archiv f. Dermatologie u. Syphilis, 1889, Hft. 4) relates the histories of five patients affected with a peculiar disease which he is disposed to classify with zoster. From its bilateral distribution, its tendency to recur, and the fact that it did not follow intimately the distribution of the nerve trunks, it derives its atypic features. In four out of the five cases the disease attacked girls in whom hysteria was well marked.

The affection is characterized by the appearance of grouped vesicles, which soon take on a gangrenous appearance, and often heal with a keloid-like scar. When fully developed, the gangrenous spots resemble the appearance presented after an artificial cauterization.

The Sterilization of Sounds and Bougies.—M. Poncet has adopted as the best agent for this purpose dry heat at a temperature of 140° C.

Sounds submitted to this temperature for half an hour undergo no change. Perfect asepsis is proved from the fact that particles of sounds so treated produce no growth in cultivation media.

To preserve the sounds in an aseptic state, they are placed in powdered tale previously heated to a temperature of 140° C.

Particles of sounds so preserved are also incapable of giving rise to any change in the cultivation media. This procedure has the advantage over others, as moist heat, liquids, etc., in that the latter rapidly change the texture of the instruments.—*Lyon médical*, 23 février 1890.

Cystinuria.—Hans Leo (Zeitschrift für klin. Med., p. 325, 1889) observed, in the service of Prof. Senator, a woman, aged forty years, who had been affected during a number of years with nephritic colic, occurring several times each year. The urine examined at the time of her admission to the hospital had a normal color, was rarely acid, frequently alkaline, and contained sediment. The sediment always contained a large quantity of crystals of cystine mixed with lymphoid and epithelial cells. The author endeavored to ascertain the causes which influenced the daily quantity of cystine excreted. Muscular exercise was found to be without influence; it was the same after supra-alimentation with nitrogenous food, for, just as after the ordinary diet, the patient continued to excrete from twelve to fifteen centigrammes of cystine a day.

The American Association of Genito-urinary Surgeons.—The fourth annual meeting of this association will be held at Cresson, Pa., on Tuesday and Wednesday, June 3 and 4, 1890. The following papers are announced: Tuberculosis Uro-genitalis. It is hoped that one session will be devoted to the discussion of this subject, which will be introduced by a paper by Dr. J. P. Bryson, of St. Louis. Observations upon Gradual Dilatation for Urethral Stricture, by Dr. R. W. Taylor, of New York. Cases of Successful Operation for Bulbo-membranous, Close Strictures, by Internal Urethrotomy, by Dr. E. R. Palmer, of Louisville. Diphtheria of the Meatus Urinarius, by Dr. F. Tilden Brown, of New York. A New Means for the Removal of Intravesical Growths through a Suprapubic Cystotomy, by Dr. F. S. Watson, of Boston. Peripheral Neuritis of Syphilitic Origin, by Dr. J. A. Fordyce, of New York. A Case of Severe Hematuria (Nephrectomy by Dr. McBurney). Recovery, by Dr. F. Tilden Brown, of New York. A Contribution to the Study of Prehistoric Syphilis in America, by Dr. J. Nevins Hyde, of Chicago. A Case of Nephrectomy, by Dr. E. L. Keyes, of New York. Notes on the

Operation, After-treatment, and Results of Litholapaxy, by Dr. George Chismore, of San Francisco. Notes on the Technique of Suprapubic Cystotomy and Prostatectomy, by Dr. W. T. Belfield, of Chicago. A Case of Obscure Bladder Disease treated by Suprapubic Cystotomy and Prolonged Drainage, by Dr. L. B. Bangs, of New York. A Case of Cystitis with the Formation of Thick Epidermoid Membrane in the Bladder (Microscopical Demonstration), by Dr. A. T. Cabot, of Boston. Presentation of New Urethral Instruments, by Dr. F. Tilden Brown, of New York. The indications are that the meeting will be largely attended and successful in every respect.

The Tenth International Medical Congress is to be held in Berlin from August 4 to August 9, 1890.

The Congress is to be divided into eighteen sections. The Committee on Organization of the Section in Dermatology and Syphilography comprises Lassar, chairman; Caspary, Doutrelepon, Köbner, Lesser, Lewin, Neisser, Unna, and Wolff.

The preliminary programme of the Section in Dermatology and Syphilography is thus announced: 1. Pathology of pigmentations and decolorations of the skin. 2. Diagnosis, prognosis, and therapeutics of chronic gonorrhœa in both sexes. 3. Treatment of syphilis. I. Results (a) of excision, (b) of general preventive treatment. II. The commencement, duration (chronic, intermittent, or temporary), and safest treatment of constitutional syphilis. 4. On the treatment of inflammatory diseases of the skin. 5. The special indications for the various methods of employing mercury in the treatment of syphilis. 6. To what exciting causes is the outbreak of tertiary forms of syphilis to be referred? 7. On the influence of diatheses, of nervous causes and of parasites, in the ætiology of the group of diseases termed eczema. 8. On the nature of exanthemata due to the use of drugs. 9. Lupus erythematosus, its nature and treatment.

Unna, to whom has been assigned the subject of The Nature of the Drug Eruptions, has invited the following gentlemen to act as *referenten* and *conferenten*: Campana, Colecott Fox, Hallopeau, Malcolm Morris, P. A. Morrow, and Rollet.

Nephritis without Albuminuria.—Billaux (*Journal des sciences médicales de Lille*, 20 décembre, 1889) concludes his article as follows:

1. Albuminuria is only one symptom of chronic nephritis, and, like all symptoms, may be temporarily or permanently absent.

2. The excretion of albumin in chronic Bright's disease is an important symptom, and should lead the practitioner to subject the urine to repeated examinations.

3. Albuminuria is especially apt to be absent during the uræmic attacks.

4. Certain ulcers of the stomach and duodenum are only accidents of the arterial sclerosis of chronic nephritis. It is therefore of importance in hæmorrhages from the digestive tract to search for evidence of Bright's disease.—*Annales des maladies des organes génito-urinaires*, février, 1890.

Pityriasis Rosea.—Professor Borduzzi (*Giorn. ital. delle malattie veneree e della pelle*, 1889) reports three cases of the affection observed by himself in which he subjected the scales to a careful bacteriological examination without finding anything except the ordinary micro-organisms of the skin.

He does not think the affection one of parasitic nature. The disease healed within from three to eight weeks in all the cases observed by the author and never presented any complications.—*Monatshefte f. prak. Dermat.*, Band x, No. 5.

Dr. William T. Belfield, 612 Opera - House Building, Chicago, Illinois, U. S. A. respectfully solicits information concerning unpublished cases of operations upon the prostate, especially for the relief of the so-called hypertrophy of the organ.

Books and Journals Received.

Plagues, Ancient and Modern ; or, the Black Death and the Sweating Sickness. By Joseph Frank Payne, M. D.

The Prophylaxis of Ringworm of the Scalp. By Frederick J. Levisaur, M. D.

A Hitherto Undescribed Disease of the Ovary. Endothelioma changing to Angeioma and Hæmatoma. By M. A. Dixon Jones, M. D.

Digest of Twenty Years' Experience in the Treatment of Uterine Cancer, including Three Hundred and Sixty-seven Operations by Galvano-cautery. By John Byrne, M. D., M. R. C. S. E.

History and Value of Antiseptics, together with Remarks on Antiseptic Dressings. By E. W. Cushing, M. D.

Relations of Certain Bacteria to Puerperal Inflammations. By E. W. Cushing, M. D.

Examination of Sputa for Tubercle Bacilli, with Cases. By E. W. Cushing, M. D.

Quelle part d'influence devient à syphilis dans la production du tabes. Note à propos d'un cas où le tabes a été antérieur de cinq ans au minimum à une syphilis confirmée. Par le Professeur H. Leloir.

Du traitement de la syphilis par les injections suscutanées de préparations hydrargyriques. Par le Professeur H. Leloir et M. A. Tavernier.

Syphilomes chancreiformes reveals Locaux du virus. Par le Professeur H. Leloir.

Epidémie de vaccine chancreiforme de la Motte au Bois, sa nature. Par le Professeur H. Leloir.

Des dermatoses indicatrices. Par le Professeur H. Leloir.

Tratamiento de las Ulceras Venéreas con el Acido Salicilico. Por el Dr. Carlos Szadek (de Kiev).

La Verruga Peruana e en especial su Etiologia. Por Alejandro del Rio.

Zur Behandlung der Tricophytia Capitis. Von P. G. Unna.

Gebrauch des Ichthyols bei Inneren Krankheiten. Von P. G. Unna.

Hyphogenic, Coccogenic, and Bacillogenic Syccosis. By Dr. P. G. Unna.

The Climate of Southern California in Relation to Renal Diseases. By P. C. Remondino, M. D.

A Case of Purpura with Circinate Lesions. By Henry W. Stelwagon, M. D.

The Alleged Tolerance of the Iodides in Late Syphilis. By Henry W. Stelwagon, M. D.

A Case of Urticaria Pigmentosa. By Henry W. Stelwagon, M. D.

Molluscum Contagiosum. A Preliminary Report. By Henry W. Stelwagon, M. D.

Dermatitis Herpetiformis. Report of Three Cases. By Henry W. Stelwagon, M. D.

Della cura della sifilide colle miezioni sottocutanee di preparati mercuriali. Par Prof. Henri Leloir e Dott. A. Tavernier, Milano, 1889.

A propos d'un cas de lèpre observé à Lille. Par le Dr. Em. Baude, externe des hôpitaux.

Ueber Acutes umschriebenes Hautödem. Von Dr. Max Joseph, in Berlin.

Ueber die Anwendung des Ichthyols bei Frauenkrankheiten. Von Dr. H. W. Freund.

Beitrag zur äusseren und inneren Anwendung des Ichthyols. Von Prof. Nils Osn, Gadde.

Ueber den inneren Gebrauch des Ichthyols. Von Dr. von Nussbaum, in München.

Sus le traitement électrique des fibromes utérins. Par les Docteurs L. Championnière et Danion.

A Paper on Kraurosis Vulvæ. By Dr. A. H. Ohmann-Dumesnil.

Alopecia Areata due to Traumatism. By Dr. A. H. Ohmann-Dumesnil.

The Treatment of Syccosis. By A. H. Ohmann-Dumesnil.

Personal Observations of Leprosy in Mexico and the Sandwich Islands. By Prince A. Morrow, M. D.

PHILIPPE RICORD, 1800-1889.

THE obsequies of this illustrious syphilographer were celebrated with great pomp and splendor in Paris on October 26, 1889. The most distinguished medical men of France assembled to honor his memory and pay tribute to his brilliant scientific achievements, which have commanded the admiration of the professional world, as well as his rare personal qualities, which endeared him to all with whom he was brought into intimate relations.

We have just received a copy of the funeral discourses pronounced over his tomb by Dr. Péan, in the name of the Academy of Medicine ; by Dr. Horteloup, in the name of the surgeons of the hospitals of Paris ; by Dr. Dentu, in the name of the Society of Surgery ; by Dr. Mauriac, in the name of the physicians of the Hôpital du Midi ; by Professor Fournier and Professor Diday, in the name of his pupils ; by Dr. Peyron, Dr. Riaut, Dr. De Ranse, Dr. O'Connor, M. le Comte de Beaufort, and M. Deslandes Vinay, on behalf of numerous societies and institutions. We have also received a biographical notice of Ricord by Dr. Zambaco Pasha, of Constantinople, which is a most graceful, eloquent, and affectionate tribute to the distinguished master by one of his former pupils.

The incidents of Ricord's remarkable career and the brilliant results of his genius and labors in bringing order out of chaos in the department of venereology are familiar to all medical men. He may be justly styled the creator of the modern school of venereology. To his investigations and experiments is due the final overthrow of the doctrine of the unity of all forms of venereal disease, while his name has been associated with almost every important advance made in our knowledge of syphilis during the present century.

As a fitting recognition of his brilliant teaching and eminent services during the twenty-nine years of his connection with the *Hôpital du Midi*, it has been decreed that this institution shall henceforth bear the name of the *Hôpital Ricord*.

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Original Communications.

SOME UNUSUAL MODES OF INFECTION WITH SYPHILIS.*

By R. W. TAYLOR, M. D.,
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AS introductory to the following cases it may be of interest to mention the fact that there are two generally recognized modes of origin of acquired syphilitic infection, the one called direct infection, in which some part of a syphilitic person—such as the genital organs, the fingers, the lips, gums, teeth, tongue, pillars of fauces, tonsil, the folds between the breasts and the sides of the chest, the arms, and the nipple—come in contact with some portion or portions of the body of a non-syphilitic; and, second, mediate infection, in which some article or substance is the means of transmitting the infecting material from the diseased to the healthy person. In the latter category we find in literature the following articles mentioned: Cigars, cigar and cigarette holders, pipes, tooth brushes, tooth powders, drinking-utensils, knives, forks, spoons, razors, towels, sponges, pillows, masks, gloves, wash-rags, linen thread, silk thread, pins, needles, children's toys, nursing-bottles, rubber tubes, babies' rubber rings, trousers, bandages, surgical and cupping instruments, scarifiers, dental instruments and appliances, blow-pipes, paper-cutters, lead-pencils, speaking-trumpets, musical instruments, fish-horns, and last, but not least, the telephone has been accused of being a medium of syphilitic infection. In connection with this long list of recognized media of syphilitic infection I now present a case which carries with it intrinsic evidence of truth and of strong probability that the popular and apparently innocent gum-chewing craze may be accompanied by the hidden danger of syphilitic infection.

Then in the matter of direct infection I shall report a case which very

* Read before the American Association of Genito-urinary Surgeons, at its fourth annual meeting, June 2, 1890.

clearly brings out a danger to communities which has heretofore attracted little or no attention, certainly none in this country. In the cases reported it is clearly shown that men, by beastly and unnatural practices upon men, may be the means of conveying syphilitic infection.

I shall also present to my readers two carefully observed cases, of which the evidence points very strongly to the conclusion that syphilis was contracted in the performance of post-mortem examinations. In presenting these cases I desire it to be distinctly understood that I make no dogmatic statement that syphilis is communicated from the syphilitic dead to the live person. I only wish to put on record the evidence (which seems to be quite strong) showing the probability of syphilitic infection occurring from a body which in life was syphilitic to a healthy person. I am in hopes that this communication will be the means of bringing out any observations and views which may be held upon the subject by physicians at large.

In addition to the foregoing I shall, in the briefest possible manner, put on record some cases in which the mode of syphilitic infection was both rare and peculiar.

SYPHILITIC INFECTION BY MEANS OF CHEWING-GUM.

The following case is, in my experience, unique, and it carries with it a very important lesson in prophylaxis. Clinically it is very interesting as adding another mode to the now long list of mediate infections with syphilis. The patient was a married lady in easy circumstances and a woman of marked intelligence. Her story was clear and striking, and, although submitted to the test of severe questioning, it was not shaken in any particular. The history contains many points of great interest, and is as follows:

CASE I.—A lady, aged thirty-six, in perfect health, lived with her husband, and with them a lady friend resided as a companion. In July, 1886, the mistress of the household complained of an ulcer on the lower right eyelid near the inner canthus, which gave her great uneasiness and inconvenience by reason of the constant lacrymation and unwieldiness of the part. When first seen by me this lesion presented a characteristic nodular induration and a raw exulcerated surface. The corresponding ante-auricular ganglion was much enlarged, while those of the neck generally were less hyperplastic (later on they all became markedly enlarged and typically syphilitic). A diagnosis of syphilitic chancre was made at once, but the question of its source was then unanswerable. To make a long story short, after much inquiry and questioning it was ascertained that the lady's maid had been suffering from syphilis for some months, and that just prior to the infection of her mistress she had had pharyngeal and labial mucous patches. All possible modes of mediate infection suggested by the case were examined into, and it was finally decided that infection must have occurred by means of a towel,

for the servant after a time reluctantly confessed that she had several times wiped her mouth with the "corner of a towel."

The initial lesion on the lady's eye yielded kindly to treatment, and in due time was followed by general secondary manifestations. Under treatment these disappeared, and for about six months the patient was not under my observation. Toward the latter part of this period she was very negligent in following the prescribed treatment. The next time I saw her she was in great mental distress, and told me the following story: She had for two or three months suffered from sore mouth and tongue, but had faithfully used a gargle (bichloride, tinct. myrrh, and water) which I had given her. At irregular intervals she had used chewing-gum very vigorously more or less during the day, and once or twice noticed, on removing it from the mouth, that a little blood adhered to it. On two occasions when she was thus chewing gum she had temporarily placed her bolus on some article of furniture, and it had been taken by mistake and chewed for some time by her female companion. As she had received from me stringent instructions in every direction as to the prevention of the spread of the disease to her husband and her companion, she was on each of these occasions somewhat troubled in mind and on the alert. For two weeks before the visit to me just mentioned her companion had complained of a sore just within the lower lip on the right side, which had failed to disappear under the use of borax, alum, and other domestic remedies. The lady's friend was in total ignorance of the nature of her trouble, but stated that in brushing her teeth a few weeks before she had abraded the lip, so that it was painful, and the sore thus produced had not healed. My informant told me that she was certain that her companion chewed her gum by mistake just about the time when she had wounded her lip. A few days later I examined the lady's companion and found a typical indurated chancre of the lower lip and marked submaxillary and cervical adenopathy. In due time roseola and rheumatoid pains ushered in the secondary period of syphilis.

I may say that I eliminated such sources of mediate infection as towels and sponges, drinking-utensils, needles, thread and silk, pins, pencils and pen-holders, paper-cutters, many apparatuses, and, in fact, every article which these ladies might at any time use in common. I may add that at no time had they slept together; hence that as a medium of infection pillows were not to be considered.

It seems therefore reasonably certain that the chewing-gum was the mediate infecting agent. We must place it, therefore, in the category of media of syphilitic infection.

With this experience in mind, I now always ask female patients having any secondary lesion of syphilis in the mouth whether they chew gum.

SYPHILIS COMMUNICATED BY ONE MAN TO ANOTHER BY MEANS OF AN
UNNATURAL PRACTICE.

CASE II.—On the 7th of May, 1888, a young man aged thirty-two, of fair average build and good habits, consulted me at the suggestion of Dr. B. A.

Lindsey. Dr. Lindsey had made a diagnosis of syphilis in the patient's case, which had been questioned by a prominent practitioner of this city. So the man was sent to me for my opinion. Examination showed upon the penis three quite large, perfectly healed, indurated nodules, the larger one seated in the median line in the balano-preputial sulcus and the other two a little farther up and seemingly seated over the dorsal lymphatics. They abutted against one another as beads do on a string. There was marked adenopathy over the whole body, and on the trunk a well-marked roseola. Dr. Lindsey's diagnosis was therefore confirmed. Owing to much suffering from gonorrhœa two years ago, patient has had no intercourse with women since. The history of the present infection is as follows: At about the middle of March of this year, late at night, while going home slightly under the influence of liquor, the patient was accosted by a man in Twelfth Street near Fifth Avenue who put his hand on his shoulder and led him to a retired corner. The stranger then drew his penis from his trousers and inserted it in his mouth. During the act the patient experienced slight pain from the sharpness of the man's teeth. Two weeks after this encounter three excoriations appeared on the sites now occupied by the nodules. Careful questioning only tended to draw from the patient reiterated assurances that he had had no sexual intercourse in two years, and that there was no other circumstance which could have given rise to the ulcerations. The case, therefore, is an undoubted instance of syphilitic infection from one man's mouth to another's penis in an unnatural and beastly act.

A fact brought out by this case should be strongly emphasized. It seems that an eminent practitioner of this city pronounced this man free from syphilis for the reason that he had not had connection with a woman for fully two years. Seeing that this man-to-man mode of syphilitic infection may at any time occur and to any one, we, in our examinations, must not only ask the patient when he * was with a woman last, but in

* In the American Journal of Dermatology and Syphilography for July, 1871, I published a case in which it appeared that the first period of incubation of syphilis was very short. The patient was a very intelligent man and, though closely questioned by Dr. Bumstead and myself, and also by other gentleman skilled in venereal diseases, he persisted in the assertion that the only time he had had *coitus* in many months was two days before the appearance of his initial syphilitic lesion. The case, therefore, came to be remarkable, and it was published as an extraordinary exception in the evolution of syphilis. At that date, 1871, unnatural modes of sexual indulgence were not as common as they are now, and medical men had not had their attention called to them in a prominent manner. Thus it was that fully six skilled diagnosticians had accepted this man's story. Several years after his infection with syphilis I saw him again, and in the mean time I had seen cases in men and women in which syphilis had been contracted in unnatural ways, particularly by mouth-suction. I then learned that about two weeks before the appearance of the chancre a woman had thus caressed him, but, as he tritely remarked, he did not consider that as being with a woman. I have since found that many men are of the same impression, and I have become convinced

uncertain and suspicious cases we must endeavor (using tact and prudence in order to avoid offense) to ascertain whether the syphilitic infection has been derived from a man.

There is a class of men, chiefly young (but there are older ones among their number), who are victims of sexual perversion and who grant to and receive from men libidinous favors in revolting and unnatural practices. By the laity they are called Charleys and Sissies, and obscene epithets are freely applied to them. They circulate in our midst and patrol dark and unfrequented streets, and prove a constant source of annoyance to the police after dark by "hanging around" our public parks and haunting the public places of urination, and also water-closets in hotels. They are rarely, I am told, of a mercenary turn like their sister colleagues in prostitution, but seem impelled by an irresistible impulse to toy with and fondle the genitals of their fellow-men. The active agent in the case just detailed was one of this gang, and a walk around town will convince any one that there are many men plying the same vocation. In the present case the mode of syphilitic infection was clear and striking, and it is interesting to note that in December, 1888, I presented one of these men, suffering from a well-marked chancre of the right tonsil and general syphilitic manifestations, to the New York Dermatological Society. This man undoubtedly received his infection from the penis of a man on which a hard chancre was seated, and there is no knowing how many men he had infected before his tonsillar chancre caused such pain and uneasiness that deglutition and sucking movements were impossible.

From the foregoing facts, which I believe are now first promulgated, we can see that we have yet another dangerous class in our midst, and that syphilis carried by men lurks in the darkness and stalks by night. When in the future legislation is made (if it ever shall be) for the prevention of venereal diseases in this country or State, these syphilitic Charleys should be prominently remembered. It may be of interest to add that the members of this promising fraternity are well known to the police, who, having an antipathy to them as a rule, keep a sharp eye upon them, cause them to keep moving, and in every possible way interfere with their beastly pursuits.

that our classical question, put when we are trying to ascertain the incubation period of a chancre—When were you with a woman last?—will not in many cases bring forth a truthful answer, and that we must sometimes inquire concerning methods about which some men have no shame, while others are very sensitive. It is very certain that syphilis is not infrequently contracted from the mouths of women suffering from buccal lesions, and it is well, for many reasons, that physicians should be aware of the fact. Some men prefer this unnatural practice from lust. Others cause its adoption under the impression that they are thus saved from the danger of venereal diseases. I have seen many of these individuals painfully undeceived.

THE QUESTION OF THE PROBABILITY OF POST-MORTEM INFECTION
WITH SYPHILIS.

We now come to a less revolting mode of syphilitic infection. With the exception of the eminent Danish syphilographer,* Dr. R. Bergh, I believe that no author has treated of the occurrence of syphilitic infection from the cadaver of a person who died during the active stage of a diathesis. This subject was brought prominently to my mind many years ago by the occurrence of syphilis in a medical friend who had performed an autopsy upon a patient who died of syphilis maligna and tuberculosis, all facts pointing to this operation as the origin of his infection. At that time I made full notes of the case of the patient and of subsequent results, and I now present them. Following this history, I give the account sent to me by a physician who, at the suggestion of my friend Dr. Charles B. Kelsey, consulted me for the purpose of obtaining a diagnosis of two syphilitic ulcers on his finger-tips and a commencing roseola :

SYPHILITIC INFECTION PROBABLY FROM A CADAVER.

CASE III.—The patient was an Englishman, twenty-nine years of age, who, two weeks after coitus, noticed a raw, slightly elevated papule of the size of a silver three-cent piece on the dorsum of the penis near the pubes. In five weeks a very copious eruption appeared over the whole body, it being particularly well marked on the forehead, especially at the margin of the scalp. With the appearance of the eruption the patient's general condition became very bad. He became much debilitated, and even utterly abject. He suffered severely with pains in the large joints and muscles of the extremities, which were worse at night. In addition, he was extremely nervous, and wanted to be constantly on the move. His temperature was at times increased, and at other times he suffered from cold sweats, which left him exhausted. In this state he was seen by a physician, who pronounced his case to be small-pox, and ordered him to be removed to the upper part of the house and there to stay, while every one should keep away from him except his mother, who nursed him. In this condition of sequestration he remained five weeks, during which time he was treated with tonics and nutritious broths. At the end of this period it dawned upon his physician that a mistake in diagnosis had been made, the acknowledgment of which led to his prompt dismissal.

The patient was then intrusted to the charge of a young physician, now dead, who immediately made a diagnosis of syphilis, and sought my aid for its confirmation and treatment of the case. We found a man very greatly emaciated, troubled with a persistent hacking cough, utterly unable to rise from bed, without any appetite, and with a constantly elevated temperature. At the upper half of each lung marked consolidation was discovered, and all

* Ueber Ansteckung und Ansteckungswege bei Syphilis. Monatshefte für prak. Dermatologie, vol. vii, 1888, p. 149 *et seq.*

the physical signs were in conformity with that condition. Over the whole body a profuse large and small papular syphilide was scattered. All the external ganglia were typically swollen. Although appropriate treatment was followed and every hygienic aid invoked, the patient succumbed six weeks after my first visit and four months from the time of the appearance of the initial syphilitic lesion.

(This case is an excellent illustration of a class which is happily rather rare, which we term malignant or galloping syphilis. These questions suggest themselves very forcibly, namely: How much did the error of the physician contribute to the malignancy of the case? and Would a promptly instituted mercurial treatment have averted the sad calamity? I am fully convinced that it would have done so.)

Eight hours after the death of this patient my friend made an autopsy upon his remains, during which he broke the end of the at that time intact nail of the left middle finger and tore the flesh to the quick. The raw surface thus left healed in five days. On the fifteenth day after the autopsy, redness and a slight fissure developed in the previously affected finger-end, and within two weeks an exuberant chancre with a vegetating surface, together with enlargement of the corresponding epitrochlear and axillary ganglia, was developed. In forty-five days general syphilitic manifestations appeared.

At the time of the autopsy my friend felt very uneasy about the accident, and as promptly as possible took measures to prevent infection of any kind—pyæmic, septicæmic, or syphilitic. He, after much reflection, convinced himself that he had not been exposed to syphilis in any manner certainly for seven or eight weeks prior to the autopsy, and that his infection occurred while performing that operation. During his period of attendance upon the patient there had been no lesions upon the latter which could possibly have conveyed syphilitic infection.

In reply to a series of written questions I received the following communication from Dr. Kelsey's friend, which fully explains itself:

CASE IV.—I am twenty-six years of age, of a strong and vigorous constitution, have never had any venereal disease nor taken any medicine in years, and do not smoke or drink. I am told that when a child I had a slight "running" from my left ear. For the past ten years my hair has been getting thin and coming out—all indications of a mild scrofulous taint—although my parents are strong and remarkably healthy people.

The date of contagion was probably December 21, 1887, although I made an autopsy on a case November 29, 1887.

The first autopsy (Nov. 29th) was on a woman who died of apoplectic congestion of the brain. There were scars on her body—no doubt the result of syphilitic lesions, she being a prostitute. At the time of this autopsy, nine hours after death, my third finger had a small crack just under the nail, which I covered with collodion. The crack after this autopsy became a little

more inflamed and would not heal, but it was not until after the second autopsy, December 21, 1887, that the fingers gave me any trouble. The second case was a man who died of acute alcoholism, cirrhosis of the liver and kidneys. He had a fracture of the jaw of the right side, with a very large external wound, extending from the inferior maxilla almost to the malar bone, and about an inch and a half to two inches in width. There was not any attempt at granulation or repair. The edges of the wound sloughed. The man was in a separate ward, but the odor from him was unbearable—simply disgusting. In this case the autopsy was made five hours after death. I am more inclined, after some thought, to attribute the contagion to the woman, and that possibly I received simply blood poisoning from the second case, thus aggravating the former.

I did not operate on or attend any syphilitic case, or attend any syphilitic women in confinement, or perform any operation whatever upon syphilitics. The first appearance of any trouble was a slightly inflamed condition of the crack in the skin close to the nail; the crack, or rather cracks (for both second and third fingers were affected), were similar to those frequently occurring in winter from cold or chapping. It was not till about three or four days after the second autopsy that the fungoid appearances set in. The excessive granulations, or rather fungoid growth, were cauterized with nitrate of silver, and here was the starting-point of the most peculiar-looking growth I have ever seen. Within two hours after being cauterized the fungoid growth had raised up and lifted the slough produced by the caustic almost a quarter of an inch above the surrounding healthy skin. Pure carbolic acid and pure nitric acid were tried in turn with like results. The granulations were large, about one sixteenth of an inch in diameter, and each stood out apparently separated from the others. The color was a pale gray, somewhat like a mucoid polypoid growth in the nose. There was not the first appearance of any blood-vessels. I now tried strapping with adhesive straps, which had no effect. At last twenty per cent. strength of oleate of mercury was applied thrice daily, which cleared away the fungoid growth and left a bright-red base. Balsam of Peru finally effected a cure. Before the fingers were strapped, iodoform was used and failed to accomplish anything.

For the past four or five weeks I noticed the glands of my left arm were enlarged, but supposed it to be due to simple blood-poisoning. For the purpose of cleansing my system I resorted to the Turkish bath about once a week. On the 23d of January, 1888 I took a bath, a rather prolonged one, including the plunge. The next night, on going to bed, I noticed a rash on my arms and hands, and, on making a careful examination, I found myself covered.

The rash is now gradually disappearing, but the glands of my arms are very much enlarged at the elbow, the trochlear gland is about half an inch in diameter, while in the axilla of the same side (*i. e.*, left) there are four or five glands, the largest being about an inch to an inch and a quarter in diameter. The glands in the groin are less than a quarter of an inch in diameter, making due allowance for the thickness of the skin.

On the day following the bath (*i. e.*, January 24th) I was very feverish—so much so that a medical friend asked me if I was sick, as my face was so red

and flushed. Looking back, I can now explain why I felt so much mental depression. Ever since my fingers have been in this condition I have felt blue and melancholy. I often wondered at the time the cause of it, but now it is clear.

I at once made a diagnosis of syphilis, which much surprised the gentleman, for he knew of no means by which he could have contracted that disease. He supposed that he had gotten some other form of blood poisoning from one of the cadavers. In the light of my diagnosis, he became firmly convinced that he had inoculated himself with syphilis during the post-mortem examination of one of the cases just detailed. It will be noted that the first autopsy was made on the 29th of November, and that secondary manifestations of syphilis showed themselves upon the 23d of January following, thus making a period of fifty-four days (assuming, as it is very certain, that infection took place during the first autopsy) from infection to systemic outburst. This length of time would fully cover the two classical periods of incubation observed in the development of syphilis. The time between the second autopsy and evidences of infection was too short by far for syphilis.

I must call attention to the fact that in both cases the autopsy was made in a comparatively short period after death. In the first, eight hours had elapsed, and in the second case nine hours after death before the post-mortem examination was made. I have made many inquiries of medical men who in dissecting-rooms, in autopsy theatres and morgues, and in private practice, have made many post-mortem examinations, but have been unable to learn any facts pointing to syphilitic infection from cadavers. I have been told on good authority, however, that a prominent surgeon of this city, now deceased, became infected with syphilis while holding an autopsy upon a patient who died with that diathesis active in his system.

If in the future it shall be made certain that syphilis may be contracted from an infected cadaver, I am inclined to the belief that the operation must be done soon after death or before cadaveric changes have taken place, for the latter undoubtedly destroy the syphilitic virus.

Let us turn now to the consideration of a series of cases which show unusual and peculiar modes of syphilitic infection between living subjects. Within the past few years the following cases, illustrating unusual and peculiar modes of syphilitic infection, have been seen by me in public and in private practice :

SYPHILITIC INFECTION BY MEANS OF A CAUSTIC-HOLDER.

CASE V.—A gentleman, aged thirty-four, had an abrasion on the prepuce which was touched by a physician with a very short nitrate-of-silver stick held in a silver holder. In three weeks a typical hard chancre appeared,

which was followed by syphilis. The physician informed me that he was fully convinced that he had communicated the poison, which he thought had lodged either upon the caustic or upon the holder. The gentleman was of the same opinion, for the reason that the only woman he had cohabited with for years was perfectly healthy.

SYPHILITIC INFECTION BY MEANS OF A HANDKERCHIEF.

CASE VI.—A lady, nineteen years of age, had an herpetic ulcer upon the lower lip. She used several times during an evening the handkerchief of her lover, who had mucous patches in the throat and on the tongue. Result: a hard chancre and general syphilitic manifestations.

SYPHILITIC INFECTION PROBABLY FROM A BATHING-SUIT.

CASE VII.—A lady, aged twenty, had just recovered from menstruation and had on the free margin of the left labium majus a linear excoriation from menstrual herpes, from which she very often suffered. She went to Coney Island and bathed in a borrowed bathing suit, feeling irritated in the parts while it was on. In two weeks an obstinate indurated ulcer formed, which in due time was followed by syphilis. She was positive that her syphilis was contracted from the bathing-suit, and her answers to all questions put regarding other modes of infection left the impression on my mind that she was correct in her belief.

SYPHILITIC INFECTION PROBABLY FROM A SYRINGE.

CASE VIII.—A lady, thirty-six years of age, living in an out-of-the-way abode with a female friend and an aged servant, used a Davidson syringe *per vaginam* which belonged to her lady friend. Three weeks later the patient noticed an excoriation at the introitus vaginae, which, in spite of cleanliness and cooling douches, increased in extent. Two months later roseola, mucous patches, and rheumatoid pains caused her to seek relief at my hands. She said that various circumstances convinced her thoroughly that her friend had syphilis, and that she took the disease from the syringe. Whether she did or did not I can not positively say, but the logical conclusion to be drawn from her case is to beware of syringes which belong to other people.

SYPHILITIC INFECTION PROBABLY BY MEANS OF A PAIR OF DRAWERS.

CASE IX.—A female, aged thirty, presented a characteristic hard chancre of the size of a silver half-dollar, which was seated on the inner portion of the thigh two inches below the vulva. It is very probable, in the light of all the facts elicited by me from the woman, who was quite intelligent, that infection took place by means of a pair of drawers which belonged to a syphilitic female who lodged in the same room with her. One night they indulged together in too much beer and whisky, and the next morning by mistake they exchanged drawers. The newly infected woman had excoriations on the thighs, and one of these became inoculated. Later on, general manifestations of syphilis appeared.

Within a few weeks I had under observation a woman who had an almost similar hard chancre of the thigh, which it is very probable was contracted from a man with whom she cohabited, who had condylomata lata on his scrotum, while the inside of her thighs was in an excoriated condition.

SYPHILITIC INFECTION BY MEANS OF ADHESIVE PLASTER OR THROUGH DRESSING OF A WOUND.

CASE X.—I have now in my ward at the Charity Hospital a woman who presents a general discrete and ringed papular syphilide with tendency to rupia upon the legs, who was probably infected with syphilis by an interne in a hospital. She is twenty-four years of age, has been married four years, and has a perfectly healthy husband and one healthy child. Ten months ago she went into a hospital suffering from some tumors of the ovary. She was perfectly healthy prior to admission and had had no suspicious intercourse. Two weeks were passed in preparatory treatment before the operation. Two weeks after this event the house surgeon removed the adhesive-plaster dressings quickly and with force, so that in one spot an excoriated surface was left. New plasters were applied which, when removed a few days later, revealed an indolent ulcer at the seat of this excoriation. This ulcer became elevated and hardened and did not heal. The inguinal ganglia became enlarged, and in two months from the date of the appearance of the sore (which was just below and on the right of the umbilicus) a syphilide appeared all over the body.

From a careful consideration of this case, I am led to believe that the syphilitic virus was either implanted by the fingers of the house surgeon upon the excoriation, or that it had in some unknown way gotten upon the plaster. This case shows how careful surgeons, house surgeons, orderlies, and dressers should be in thoroughly cleansing their hands after touching, even in a superficial manner, patients with any infectious disease, particularly syphilis.

SYPHILITIC INFECTION PROBABLY CONTRACTED IN A WATER-CLOSET.

I have long thought that the profession is far too skeptical as regards the possibility of syphilis being contracted in a water-closet. I have seen so many cases of hard chancre, the bearers of which have told me that they frequently, while at business or away from home, renewed their dressings and inspected their penis while sitting upon a water-closet seat, that I have been surprised that infection by this means is not common. Then, again, we constantly see cases of mucous patches and condylomata lata of the scrotum (particularly in the lower and uncleanly orders) which it would seem must, unless great care and circumspection were exercised, come in contact with the water-closet seat. It has often occurred to me that it was a little less than a miracle that these men did not spread syphilis. Then,

again, cases of condylomata lata and syphilitic ulcers of the perinaeum and buttocks are not at all uncommon, and we constantly see cases in which patients thus suffering state that they have used various water-closets without taking any care whatever to cover these lesions. Therefore I say that the communication of syphilis under these circumstances is easily credible, and that it is a great wonder that it does not more commonly occur. The following case is reported in confirmation of these remarks:

CASE XI.—The patient is a married man, aged twenty-nine, and a prosperous merchant. On November 2, 1888, he came to me with a typical hard chancre on the anterior portion of the scrotum and bi-inguinal adenopathy. I learned positively that he had had suspicious connection but once within a year, and that at that time, about a month previous, by reason of great haste and prudence, only the penis had been exposed. He is absolutely positive that his scrotum had not come in contact with the woman. Furthermore, this woman, I am certain, is not syphilitic and has not had any lesions of any sort about her genitals. After much thought the patient reached the following conclusions: About three weeks before he consulted me he had experienced an itching on the scrotum, and to relieve it he scratched so violently that an excoriation was produced; while his scrotum was thus raw he indulged in liquor in a Bowery saloon, and became slightly intoxicated. In this condition he went to the adjoining water-closet (which was used by the frequenters of the saloon) and there fell asleep on the seat. From the date of this debauch the excoriation showed no tendency to heal, but on its site a somewhat hard, exulcerated nodule developed, and coincidently with this indurating process inguinal adenitis was observed, which was much marked on the right side, corresponding with the hard chancre of the scrotum. The appearances of the scrotal lesion and the swelling of the ganglia are well shown in the water-color I present to the association. In due time secondary manifestations appeared. Every fact concerning this case points to the water-closet of the Bowery dive as the source of the syphilitic infection.

SYPHILITIC INFECTION PROBABLY FROM A CONDUCTOR'S WHISTLE.

CASE XII.—Several years ago I had under observation a girl, aged ten years, who had a typical indurated chancre on her upper lip. Her mother was utterly unable to account for the lesion, and I, after some trouble, ascertained that neither the parents nor the other children of the family were affected with syphilis. It so happened that about this time a young man was under my care for syphilis who suffered severely from mouth lesions, and who boarded with this family. This man's occupation as a car conductor caused him to employ a whistle, which on his days off he left at home. It was learned that previous to the onset of the sore lip of the little girl she had played with this whistle, but it was not known that she had a crack or abrasion about the mouth. By exclusion, after due care and questioning, I reached the conclusion that this whistle was the medium of syphilitic infection to the young girl.

SYPHILITIC INFECTION PROBABLY FROM A TONGUE SCRAPER.

CASE XIII.—Some time ago I was much perplexed as to the contaminating source of a hard chancre on the side of the tongue of a young man. Owing to various circumstances, it happened that he had not been near any females for several months, nor had he used a towel or drinking-vessel in common with others. He was a very intelligent man, and, guided by my suggestions, had made every endeavor to learn the source of infection. After much thought and inquiry he satisfied himself that his syphilis was derived from a male companion who was suffering from that disease, particularly in the mouth. It transpired that one evening, about three weeks before the appearance of the lingual chancre, my patient used the ivory tongue scraper of his syphilitic friend, at that time being ignorant of the latter's diseased condition. This is the only explanation he could give of the origin of the disease in him, and it certainly is reasonable to suppose that the syphilitic virus derived from his friend remained upon the instrument and was implanted upon the abraded surface of the tongue in the scraping motion incident to the cleansing of that organ.

SYPHILITIC INFECTION PROBABLY FROM A TOWEL.

I have seen so many cases in which the evidence was so conclusive that syphilitic infection was transmitted through a towel, that I have reached the conclusion that these useful articles are more frequently the contaminating medium than has heretofore been supposed.

CASE XIV.—I have now under treatment a young woman who is firm in the belief that she contracted her initial syphilitic lesion in this manner. She is employed in business with other young women and has always used her own towels, which she kept under lock and key. One day she loaned her towel to a fellow-employee, and two weeks after she noticed a little abrasion on the lower lip which promptly developed into an indurated chancre, which in its turn was followed by general manifestations. She is positive that she was in no other way exposed, and her persistent inquiries revealed the fact that her companion was suffering from syphilis with severe buccal and labial lesions at the time she borrowed and used the towel in question.

The following case will serve to emphasize the probability of the foregoing mode of infection :

CASE XV.—A traveling salesman, aged twenty-seven, who for months, as he said, had not been near a woman, slept in the same room with a male companion in a small Western hotel. It so happened that he had at the time an excoriation upon the lower lip from herpes. It also unfortunately happened that there was only one towel in the room, and these fellow-travelers used it in common in the morning. In a little more than a week the excoriation, which had healed, reopened and continued to become exulcerated and indurated until within a month (at his first visit to me) it had attained a larger size and was a source of great disfigurement and discomfort to him.

Secondary manifestations came in good time. This man knew that his companion was syphilitic, and subsequently learned that at the time of their sojourn at the Western hotel he had severe buccal and pharyngeal lesions.

It is interesting to add that the details of the first case of this essay present very clear evidence that a chancre on the conjunctiva was contracted by means of a towel.

The practical lessons taught by these cases are, first, to avoid, if possible, towels used by others, and, second, that physicians should instruct syphilitic patients, among other things, to keep as far as possible their towels strictly for their own use.

SYPHILITIC INFECTION PROBABLY BY MEANS OF A PILLOW.

CASE XVI.—A married lady, aged twenty-seven, went to the country to visit a sister, who had three children, the youngest of whom was two years old. This child was born a year after the infection of its mother with syphilis by her husband. It suffered from rashes, condylomata ani, and snuffles. At the time of the visit of its aunt it was troubled with a sore mouth, which was taken to be sprue. On several occasions this child slept with its aunt, who carefully avoided kissing it. She noticed, however, that the saliva escaped freely from its mouth upon the small pillow upon which her head and that of the child rested. At this time she had an insect bite upon the right cheek near the chin, which she scratched and picked. This papule healed, but in two weeks it reappeared and grew in height and area until, when first seen by me five weeks later, it had developed into a large, non-circumscribed, indurated nodule of a dull-red color, and covered with a thin seropurulent crust. The cervical and submaxillary ganglia of the same side were markedly swollen. In due time the appearance of roseola and papules about the genitals confirmed the diagnosis of syphilis.

All the facts in this case pointed to the child as the focus, and the pillow as the medium of transmission of the disease.

Too much care and watchfulness can not be exercised in the prevention of syphilis by means of infected infants and children.

SYPHILITIC INFECTION PROBABLY FROM A RAZOR.

I have now under treatment for secondary syphilis a man, aged thirty, a printer, who is positive in the belief that he contracted the disease in a barber's shop. In this case, as in all the others, I have been slow to reach conclusions as to the medium of syphilitic infection, and have not accepted hap-hazard statements of patients. In all cases I have explained to them as clearly as I could all possible sources of error and mistakes, and I have in an unprejudiced manner endeavored to arrive at correct conclusions.

CASE XVII.—The history of the patient just mentioned is as follows: He had for years suffered from papular acne of the face and neck. Several weeks

before coming to me he had been shaved in a cheap down-town barber's shop where clients were hurried off with much brusqueness and celerity. At the date assigned by him as the one upon which he was infected he noticed that the man who vacated the chair which he at once took had crusts on his forehead, nose, mouth, and chin, and a very red face. He is not aware that the barber took any pains to cleanse his lather brush or his razor. In the shaving operation the barber cut the top off a papule on the neck about four inches below the jaw. The lesion thus made bled a little and healed in a day or two. About sixteen days after this shave a little red spot appeared on the site of this lesion and promptly became sore and oozing. Though covered with court plaster, it did not heal, but in two weeks developed into a typical incrusted hard chancre with general cervical adenopathy. Secondary manifestations appeared in due time. As far as known, there was no other means by which this patient could contract syphilis.

It seems very probable that in the operation of shaving by a barber the razor is the medium of infection rather than the brush or the fingers of the artist, for the latter must of necessity be continually bathed in soapy water. In the cheap shops it seems that little attention is paid to cleansing razors, and it is probable that, although they may be briskly passed backward and forward over the strop, the syphilitic secretion may still adhere to them.

SYPHILITIC INFECTION BY MEANS OF THE FINGERS.

There is a mode of syphilitic infection which has not, I think, heretofore been described, of which I have seen certainly a dozen cases. It generally occurs in this way: a man, fearing to contract venereal diseases or for other reasons, contents himself with a digital exploration or fondling of the female genitals. Upon the latter condylomata lata or syphilitic excoriations being present, the fingers of the man become soiled with their secretion. Then by accident the virus is transferred by the finger or fingers of the man to some other part of his own body—generally by scratching or picking. In this mode, therefore, the finger is the medium of infection. I have for many years had the photograph of a young man's face showing a blooming chancre at the tip of his nose which was contracted in this manner. I have also at my hand notes of cases of chancres of the chin, the cheek, the neck, and the arm which were thus communicated.

I am therefore of the belief that many cases of chancres about the face in men originate in the manner just described.

It is almost unnecessary to remark that in medical literature many cases are recorded in which syphilis has been communicated from chancres on the fingers of surgeons, nurses, and midwives to healthy people. In these cases, however, the resulting chancres have, for obvious reasons, been found mostly upon the genitals of women.

All the foregoing cases carry with them important lessons, and many of them should teach physicians that, besides treating their syphilitic patients, they should explain to them how they may become foci of infection, and make clear to them the means of preventing that great disaster to others.

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MULTIPLE CAVERNOUS TUMORS IN A CHILD.

By J. A. FORDYCE, M. D.

I HAVE at present under my observation a child whose cutaneous surface presents a remarkable appearance, illustrated partially by the accompanying illustration.

The history as given by the mother is as follows: Mary M., aged seven months. Father and mother living, in good health, aged, respectively, thirty-two and thirty-five. The mother has had three other children, two of whom are dead—one, at eleven months, of convulsions; the other, at seven months, of marasmus. A boy, aged eight years, is living, in good health. No other members of the family or of the more remote ancestors have had any skin affection, so far as the mother is aware. During her last pregnancy she recalls that, at the fifth month, while cleaning a gas-fixture, it fell, striking her on the forehead at the root of the nose. At the birth of the child a capillary naevus was seen on it at this locality; it has since faded, so that now it is almost imperceptible except when she cries. No other spots were seen until about ten days after birth, when, in washing the child, the mother noticed a number of bright-red spots, no larger than the size of a pin's head, on either side of the vertebral column in the dorsal region; no other marks were observed on the child's body at this time. The spots on the back grew in a very gradual manner until the present dimensions were reached about one month ago, since which time they have been stationary. Shortly after these spots were seen others were remarked on the head, face, and on the upper and lower extremities; indeed, the mother has noticed, since her attention was called to the matter, that new spots have appeared from time to time, until now the tumors number over thirty, and range in size from a pin's head to the circumference of a twenty-five-cent piece. When first seen they consist apparently only of vascular dilatations of a scarlet color which disappears completely on pressure; with their growth, however, they become elevated above the cutaneous surface, and, on reaching the dimensions of a split pea, are elevated about an eighth of an inch above the *niveau*, the color assuming a more purplish hue.

Many of the tumors, on reaching the circumference of a ten-cent piece, or when even smaller, show a distinct central depression, with an elevated periphery, the skin over the depression assuming a bluish-white color, as if from the growth and contraction of connective tissue. The tumors are soft, compressible, and freely movable; their color, however,



only partially disappears on deep pressure, and quickly returns. When the child cries the tumors become larger, firmer, and of a darker color.

Location and Size.—The distribution of the tumors over the posterior portion of the scalp, the back, and over the right deltoid is illustrated in

the accompanying drawing; the tumors on the scalp, which have a lobulated appearance, were treated, when the child was about five months old, by the galvano-cautery, their altered appearance probably being due to the treatment.

In addition to the tumors shown in the illustration, there are four of about the size of a pin's head on the face, one of the size of a pea on the left arm, its inner and posterior aspect, an inch and a half above the wrist; another of the same size on the dorsal aspect of the right ring-finger; one, half an inch in diameter, on the internal aspect of the left thigh; another, of larger size, on the inner surface of the right leg; a smaller one on the dorsum of the right foot; and one, of about the size of a pea, on the dorsal surface of the right toe. On the child's forehead, extending from the root of the nose to the margin of the hair, a faintly marked capillary nevus can be seen.

About the middle of December, 1889, I removed a small tumor, of the size of a pea, from the patient's left forearm for microscopic examination. The wound healed by primary union without a return of the growth.

On February 6th I again examined the child, and found that a number of the tumors had markedly diminished in size since she was last seen. The lobulated ones over the occipital region were not more than half their former size; the punctate vascular dilatations on the face were unchanged, while no new spots had developed. The child's nutrition in the mean time had perceptibly improved. The microscopic structure of the tumors is seen from the section presented with this paper marked "*Angioma cavernosum*, No. I." As the tumor from which the section was made was of small size and in an early stage of development, one can study the earlier stages of the disease before secondary changes, resulting from blood stasis in the cavernous spaces and obliteration of the vessels from the growth of connective tissue, has taken place. The epidermis covering the tumor is somewhat thinned, the papillæ only being well marked at the borders of the growth. An unusual number of hypertrophic hair follicles are seen, some divided transversely, others longitudinally and obliquely. The blood-vessels of the superficial cutis layer are not so much affected as the deeper vessels, still newly developed blood-vessels and cavernous spaces are to be seen directly under the epidermis. It is in the deeper tissues, however, that the newly-formed vessels and cavernous spaces are seen in the greatest number. The spaces vary greatly in size, some being empty, others containing blood-corpuscles. These spaces are lined with one or more layers of somewhat elongated spindle-shaped cells, united at their extremities by fine projections, somewhat after the manner of connective-tissue cells. A number of transversely-cut blood-vessels in groups are seen, whose walls are composed of several concentric layers of spindle-shaped cells; in a number of them even the vessels' caliber is obliterated

by these successive layers of cells. One might suppose that with the growth of the tumor a part of these rudimentary vessels are destined to dilate into cavernous spaces, while others are to undergo obliteration, owing to the contraction of these young connective-tissue cells. The tissue between the blood-vessels and cavernous spaces is composed of the same kind of embryonic cells, so that the clinical feature noted in the history of my case of central atrophy and contraction of the tumors can easily be explained by the supposition that these young cells are subsequently developed into connective tissue, which, by contracting, obliterates the newly-formed blood-vessels, and produces in some cases a spontaneous cure of the disease.

Cavernous spaces with impinging walls, as if ready to break through and form communications, can be seen; other spaces exist with this communication already established. Everywhere, however, the cells present the same general characteristics of primitive connective tissue, both in the capillary vessels, connective tissue, and cavernous spaces.

In the section marked "*Angioma cavernosum*, No. II," taken from another case in which the disease was of much longer duration, the cavernous spaces are larger, filled with blood, and surrounded by thick walls of well-developed fibrous tissue evidently of much older growth than in Section No. I.

Section marked "*Angioma simplex*, No. III" presents an excellent example of this form of the disease, showing the dilated and tortuous vessels of new formation, filled with blood-corpuscles, and seated deep in the subcutaneous tissue.

The lobulated formation of the tumor, as seen in the section, results, probably, from the involvement of the vessels supplying the subcutaneous coiled glands.

The manner in which these tumors originate and develop has long been a matter of dispute, and as yet no entirely satisfactory hypothesis has been advanced that will explain all the conditions present. Rokitansky considered them as new growths which developed in the connective tissue, independent of the vascular system, and only later forming a connection with it. This theory, which formerly had much against it, has assumed a new importance in the light of the later discovery of vaso-formative cells, and of their generation of blood-corpuscles in the connective-tissue spaces.

Another argument in favor of the independent development of these tumors is the fact that in cavernous tumors of the liver a fibrous framework has been observed which as yet had formed no connection with the vascular system. Still another mode of origin is given by Babes (*Ziemszen's Handbook of Diseases of the Skin*, American translation, page 602), in which cavernous tumors developed in a man affected with scorbutic disease of the blood-vessels. Another hypothesis regards the tumor as made

up of dilated veins, the walls of which have become absorbed where they impinge upon each other, forming communicating vascular spaces. Rindfleisch holds that, preceding the vascular dilatation, there exists a small cell infiltration of the tissues which, by undergoing cicatricial contraction, distorts the blood-vessels into cavernous spaces.

These theories, which are well known and quoted in all text-books on pathological anatomy, are only referred to in this connection to show the divergence of views entertained by pathologists regarding the starting point of these vascular tumors. In regard to their time of development, the tumors in my case conform to the rule that they are seldom congenital, but develop early in infancy. Their wide distribution, however, affecting at the same time the head, face, trunk, and upper and lower extremities, is seldom observed.

When multiple they usually follow a certain vascular area, being limited to an arm, leg, or to one side of the face or head. Neither can the fissural theory of Virchow be invoked to explain their distribution, as their positions are far removed from the fetal fissures. As a rule, these tumors continue to grow until they sometimes reach to extraordinary dimensions, destroying by pressure the neighboring tissues; it is the exception for their growth to remain stationary or to undergo spontaneous involution. The indications for treatment would seem to be to observe the tumors carefully for a time, and, if a tendency to rapid extension be observed, to destroy them by some of the recognized methods in our possession—either extirpation by the knife or puncture with the galvano-cautery.

The expectant plan of treatment adopted in my own case would seem to be justified by the course of the disease. Should at any time the tumors show a tendency to increase in size, or, after waiting for a reasonable time, cease to diminish in size, some more active method will be resorted to.

66 PARK AVENUE.

LEPROSY IN JAPAN—INTERMEDIARY-HOST FUNCTION IN ITS PROPAGATION.

By ALBERT S. ASHMEAD, M. D.,
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IN an article on Elephantiasis or Filaria Disease, published in *Science*, vol. i, 1883, Professor C. V. Riley, in alluding to Dr. King's Curious Coincidences of Habits between Mosquitoes and the Observed Phenomena respecting Malaria (*American Naturalist*, May, 1883, vol. xvii; also *Scientific American*, April, 1883, vol. xlvi), says as follows:

There are fatal objections to any theory connecting the two. The connection of the mosquito as an intermediary host in the full life-devel-

opment of the hæmatozoon *Filaria sanguinis hominis*, however, has been fully and conclusively made out by Dr. Patrick Manson, of Amoy, China, in the Customs Medical Reports, published in Shanghai by the order of the Inspector-General of Customs. Dr. Manson discovered the filaria in the mosquito in 1878, and has since published several admirable articles giving the results of his experiments, which, in the main, have been indefinitely confirmed by Dr. Mackenzie, of the London Pathological Society; Lewis, of India; Myers, Cobbold, Wacherer, Bancroft, Aranjo, and others. These facts have an entomological bearing, and are of great scientific interest and practical importance. They may be briefly stated as follows: [Here he cites the discovery by Lewis in 1872 of the immature or larval hæmatozoon—who named it *Filaria sanguinis hominis*—in the blood and urine of persons afflicted with chyluria; and of the mature form by Cobbold as *Filaria Bancrofti*, in 1877, in lymph, the young making its way from the lymph to the blood through the thoracic duct, etc.; and he states that it is present in the blood of patients affected with elephantiasis, but only during the night, and that the disease is manifested by a thick tuberculate and insensible condition of the skin, akin to leprosy. He also states that the best authorities now believe that various diseases of the lymphatic vessels and glands—as varicose groin glands, lymph scrotum, elephantiasis, and chyluria—are pathologically one and the same, and are due to the presence of this filaria, which has, in fact, been recorded from south Europe, Asia, Australia, and Brazil, Dr. Aranjo having verified at Bahia its occurrence in the mosquito, and otherwise confirmed the observations of Manson and others in different parts of the world, etc.] Professor Riley concludes as follows: This I believe to be the true pathology of the elephantoid diseases: 1. Parent filaria in a distal lymphatic. 2. Preventive expulsion of ova. 3. Embolism of lymphatic glands by ova. 4. Stasis of lymph. 5. Regurgitation of lymph and partial compensation by anastomoses. 6. Renewed or continued premature expulsion of ova, further embolism of glands. This process, according to the part of the lymphatic system it occurs in, the frequency of its recurrence, and its completeness, explains every variety of elephantoid disease.

The foregoing references to *Filaria sanguinis hominis* in its pathogenic relations are most interesting. There are abundant proofs to be found in Japan to corroborate Professor Riley's theory of intermediary-host function and leprosy.

In a recent letter to the Editors of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES,* I express a belief in the multiple existence of the *Bacillus lepræ*, disparage man-to-man communicability of the disease, and suggest possible *marine zoological* intermediary-host function between *immature* leper bacilli and man.

* See page 233.

Dr. Patrick Manson, in his experiments at Hong Kong, China, and Dr. Arning, on the condemned criminal (Hawaii), both used leper lymph without leper-blood admixture. No disease resulted from their inoculations, although for many months the bacilli were detected in the sores.

In my own vaccination experience in Japan (Tokio, 1874), at the time that vaccination was first made compulsory in that country during a virulent epidemic of small-pox, from two hundred to six hundred persons a day were inoculated with vaccine lymph, many of whom were lepers or relatives of lepers, some of whom were *auto*-inoculated. No specific results followed. I therefore concluded, from these observations and the fact that for many centuries Japan had been a *tattoo-acupuncture* country, that inoculation of leper lymph *per se* was not dangerous, that vaccination in lepers was identical with vaccination in the non-leprous, and that lepro-vaccination was not a reality.

In my article on Syphilis in Japan, shortly to appear in the New York Medical Record, allusion will be made to these facts, also to tissue tuberculization in phthisis, syphilis, and leprosy.

The theory advanced by Dr. King, of Washington, D. C. (American Naturalist, 1883, vol. xlviii), relative to connection between mosquitoes and malaria is extremely interesting to Japan, that country being intensely malarial in climate, and mosquitoes and other insect pests boundlessly prevalent.

Its malaria is judged to be due to wide divergence between day and night temperatures, excessive moisture in its atmosphere, and widespread decay of vegetation in its rice-field marshes.

Malaria in Japan is mostly typhoidal or, as the native physicians improperly term it, "epidemic typhus," the result of night-filth manuring of rice crops and consequent poisoning of drinking-wells and streams.

Professor Riley's theory regarding intermediary-host carriage by mosquitoes of disease germs or immature larvæ from the blood (or lymph?) of man to drinking-water, thence back again to man, is seemingly suspected in Japan.

The following interesting Japanese facts are corroborative of it:

1. All Japanese use mosquito bars to inclose themselves in their sitting-rooms after nightfall, and not merely for the purpose of protection from the insect's sting and annoying disturbance of sleep after retiring.
2. The Japanese do not drink uncooked water if possible to avoid it, as they consider it dangerous to health.
3. Leprosy first appears on the parts of the human body most exposed to insect-foraging—viz.: feet, hands, and about the eyes and ears.
4. The Japanese in their intercourse with lepers or suspected persons carefully avoid touching their hands or faces. (No kissing ever occurs in

Japan excepting in the marital embrace,* not even between a mother and her child! Nor shaking of hands in salutation. If one was to offer a kiss to a Japanese *maiden*, she would think she was going to be bitten!)

5. To drink water or eat food of lepers in Japan, or in their community or neighborhood, is considered dangerous.

6. To even handle drinking-water or food of a leper is looked upon with suspicion. (There is an unknown relation acknowledged between food and drink and leprosy that is thought to be essential to contagion.)

7. The Japanese hesitate to eat or drink even pure food and water in contact with a leper.

8. Ancient Japanese "Ken" segregation of lepers exerts an acknowledged restraining influence on the spread and extension of the disease through permissibility of leper marriages, properly guided as follows: No backward marriages allowed; children of lepers may marry children of lepers, and grandchildren may marry grandchildren, thus unconsciously attenuating the virus and diminishing intermediary-host function. Should leprosy attack a member of a family (not leprous) in Japan, that member at once (before outsiders can know of it) disappears to wander in "beggar" disguise to some distant place in the empire where he hides himself unknown, his associates being the despised race of "Etas" or curly-headed negritoid hybrids, the "pariahs" of Japan, or the Hinins ("not human") executioners, and workers in hides and leather, or other abhorrent and outcast professions. This custom of self-immolation plays a very important part in spreading the disease in Japan, and serves to make inoperative the laws of leper segregation. It originated in order to prevent family ostracism, as no marriages are contracted with families of tainted blood. The wealthy and noble conceal their leper members in caves and mountain recesses or secluded buildings. All beggars in Japan for this reason are utterly outcast, as they are suspected of leprosy; they can neither eat nor sleep in any man's house. A dish that is passed to a beggar in alms is afterward destroyed, and the vessel from which he drinks is never used again. Should he wash himself at a well or public watering-place, that water becomes polluted in public estimation, and thenceforth is shunned. Hence "beggars" and the despised races must use streams and rivers or pools, which other people consequently avoid.

Some of the Japanese common people say that leprosy comes from India or southern China (which is quite right). Others that it originates from mixing foods, as eels and pumpkins!

The word leprosy in Japanese is "Reibio," meaning "filth or rotting disease," or "Ten-keibio," meaning "Heaven's punishment disease," or the "miraculous" disease, for they do not know in what manner it is contagious.

* Husbands and wives have passed a test for leprosy.

All Japanese think "leper pus" is contagious, the same as syphilitic pus.

The Japanese think kissing propagates such diseases as syphilis, leprosy, but *most especially consumption!* (How true!)

Their old medical books give statistics regarding correlation of consumption and kissing!

"Beggars" * (some of them "initiatory" lepers) in their wanderings sell dôjô † on canal and moat bridges, as will be shown hereafter when connecting them with a possible marine zoological host function.

9. Syphilis does *not* increase liability to leprosy. On the contrary, it restrains if it does not actually prevent it. I never saw a leper a syphilitic that I could determine to be such. ‡

10. No Japanese believes in man-to-man communicability *solely*; they claim that it is *not* "contagious."

11. Nor do they believe in direct ancestral descent of the disease from parent to child, but think that it is coincident, as in the case of contagion of small-pox and measles. They suspect and guard against it, however, for in their marriages the keenest and most searching inquiry is made into the possibility of leper taint of groom and bride, which, if detected, operates as an absolute barrier to union.

12. Some other concomitant (unknown) than either heredity or contagion is thought to be essential to transmission of the disease.

13. The Japanese evidently look on mosquitoes and other insects with pathological suspicion, for they never handle them with uncovered fingers, but always protected by a handkerchief (paper) or cloth.

14. Japan abounds in insects that sting and suck blood.

15. No one will bathe in water that is natural, or in an open stream. Their baths are made hot—105° F. to 110° F., and upward.

16. Wherever the most insects abound, there will be found the most endemic leprosy—that is, in damp and unhealthy localities, where the climate is most changeable, and drinking-water impure and most liable to be infected by them.

17. The Japanese people fear the leech in its natural habitat, although they have used it in their medicine since 732 A. D.

* When a "beggar's" leprosy becomes pronounced he is segregated by "Ken" officials.

† The parasites of the dôjô are the same as infest the carp, which fish the people eat raw. Dôjô-eating is *universal*, and is esteemed a luxury, although it is thought to be attended with danger. Too much of it will produce consumption. It has been noted that those who eat most constantly of them have a "malignant" (worst) form of consumption. They are thought to be very indigestible, and to alter in a manner the assimilative power of absorption in the stomach and bowels, and that, when this result happens, consumption begins (perhaps a change in the chyle of the thoracic duct).

‡ This statement I know to be at variance with eminent authority.

18. The "shima mushi" or "island insect" disease occurs from bathing in open streams. Its lesions closely resemble those of syphilis.

These facts are allied especially to entomology.

The following facts belong to marine zoology, where I think will be found in the future the solution of the problem :

1. Raw live fish-eating is a national *vice* in Japan. They eat the carp uncooked and esteem it a great luxury. It is called "a live preparation of Ko-i." One side of the fish is eaten while the other side, attached to the backbone, lies on the plate, still moving, and often its movements are quickened by sprinkling seasoning or "soy" on the poor creature.

2. The Japanese recognize some undefined relation between it and their sexual procreateness, for on a certain day of the year each family to whom has been born a son in the preceding year displays from the top of a bamboo pole a huge paper representation of the fish, floating in flag fashion inflated by the wind. They consider that the "life germ" eaten in this fish is necessary to the inception of human life "in testis."

3. The carp of Japan are subject to many diseases of a parasitic nature. Hosts of parasites feed upon their tissue, the *Argulus foliaceus*,* or fish louse of the *Cyprinidae*, being one of these, which causes the death of many of them, more especially the gold, silver, and black carp of the breeders.

4. "*Bothriocephalus latus*, or broad tape-worm, is thought to be derived from a parasite which inhabits the Dorse or Baltie cod, and hence it is very common in Russia and Poland, although it is sometimes attributed to eating bear's meat, as in Switzerland" (Asiatic Reports).

Bear's meat is eaten in Japan and was introduced by the Ainos † or white (old Russia) Indonesian element before the conquest of Japan.

* This parasite possesses a highly specialized and beautiful complex structure, transparent as crystal. It has two powerful suckers by which it fastens its victims, and then unsheathes a long, hollow, rapier-like probe of extreme sharpness, which it drives into the unhappy gold-fish and thereby sucks to no small advantage. It is also armed with a series of powerful hooks, and by means of its flat, fringed, oar-like limbs it can propel itself at will from one feeding-ground to another. Dr. Sanno, of Shiba, Tokio, has some specially interesting microscopic drawings taken from this parasite of the dôjô or lamprey, genus *Cobitus* or loach, family *Cyprinidae*. Dr. Faulds so describes it in Asiatic Reports, 1878, and remarks as follows: "Beggars" (infected lepers ?) are found on the bridges selling them (the dôjô) from little tubs. Pious Buddhists, who wish to purchase the merit of setting free these living creatures in the moats and canals, may do so cheaply and help the poor at the same time by purchasing one and throwing it over the bridge railing, saying a prayer at the time. This act of meritorious liberation is called Hôjôge. The fish louse is one of the most attractive and interesting objects under the microscope I have ever seen. You can study muscular tissue in action, the circulation of the blood, and movements of various organs as one might study the works of a watch made entirely of glass. The action of muscular fibers is better understood by a single glance at this pretty parasite under a powerful microscope than by endless vivisections.

† These Ainos, or "hairy men," now live in the northern islands of Yezo, Saghalien,

5. In Fiji Dr. McGregor traced a disease common and fatal among that nation to a parasite contained in the *Holothurian*, or sea slug (*beche-de-mer*), resembling Japanese Kakké.

6. Leprosy in Japan is principally to be found among the maritime hybrids of the race, especially the black hybrids or curly-headed "Eta." (Maget says that they are recognized by the negroid appearance, the somber and often blackish hue [the Arab negro hybrid type of Algiers], the curling of the hairs, the gracility of the calf, and smallness of stature, with blackish deposits on the scleroticæ.)

Dr. Brinton says that "the 'Eta' or negrito population of Japan he believes to be the primitive inhabitants of Indonesia, the Malaysans, etc., later arrivals."

There are three million "Eta" in Japan. They are pariahs, a despised race and associates of lepers, like the "Cagots," the white lepers of the Pyrenees, who are still despised and refused intermarriage, although all trace of leprosy among them has long since disappeared.

Leprosy appears also among the yellow hybrids of the Japanese. These two hybrid types are both of them sea-coast people. There are many lepers in Maganoken who are *very white*, and who live in their own houses and intermarry with themselves. They are not segregated, but no one will marry with them. Japanese common people believe that children of lepers are born with a discolored spot or tubercle on the skin, which, if at once cut or ligated off, will not result in the disease.

The Ainos are also sea-coast people, but they are *meat-eaters* (bear principally), and are *nomadic*. No nomads are endemically leprosy.

If we could ascertain a reason for the evident predilection of bacilli lepræ for the mucous membranes of the mouth, nose, and conjunctiva, or for the ulnar nerve initiatory sensibility lesion, we would, I think, be very near a solution of the pathogenetic problem.

It is certainly strange that primary skin lesions of leprosy should occur on those parts of the body most liable to insect foraging, or on mucous membranes * most exposed to germs in food and water.

Durant-Fardell believes that in leprosy in China the external lesions are but secondary, the disease attracting attention in its superficial or peripheral form, but its practical seat is deeper; that lesions characteristic of leprosy do not only concern sensibility and nutrition, but invade also the

and the Kurile Islands. They worship the bear, and their women suckle bear cubs. The Ainos are always near the sea-coast, wear fish-skin boots, and in saluting a Japanese official drag one leg; hence their abode by Japanese is called Yezo, or Yeb-iso, meaning "shrimp" and "savage." They are the aborigines of Japan, eighteen thousand still in existence. The Ainos and the Japanese both are subject to tape-worm.

* In the vagina and urethra—most protected of all—few, if any, bacilli are to be found.

muscular system. He does not distinguish between tubercular and anæsthetic types of the disease, believing these forms to be one and the same disease. He thinks that most all the symptoms are intertangled and non-separable, and believes that the original lesions are in the nerves of sensibility and the lesions of the skin are secondary. He believes that the original seat is in the nerve centers themselves.

Schmid found most leprosy in Japan in damp and changeable climates. I found it *always* where drinking-water was most impure. It is curious that so many Japanese and Chinese cases of leprosy immediately follow attacks of malaria.

Durant-Fardell so found it in China.

I am persuaded that anæsthetic nerve lesions of leprosy are secondary to the superficial lesions, which would corroborate intermediary-host function theory.

4 KING STREET, NEW YORK.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

198TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Scrofuloderma Phlegmonosum.—DR. R. M. FULLER presented a case of scrofuloderma phlegmonosum with the following history: The patient, Frederick H., was born in New York, is now sixteen months old, previous health good, no glandular enlargements.

The disease made its first appearance in February last, in the form of a small tumor, situated upon the upper anterior surface of the left thigh. The tumor slowly enlarged, gradually softened, and its cutaneous covering became thinned.

Similar tumors, five in number and of like growth, also appeared on various parts of the extremities—viz., one upon the outer surface of the lower third of the right thigh, two upon the extensor surface of the left forearm, one upon the flexor surface of the right wrist, and one over the right elbow.

One of the abscesses—viz., the last—broke, and pus, scrofulous in character, was discharged through a small opening; subsequently a crust formed. the opening healed, and the abscess was renewed.

At present the distribution of the abscesses was confined to the extremities; they were roundish in outline, and averaged about five eighths of an inch in diameter; their surface was oval and violet-red in color. The first tumor mentioned above was multiple and the remainder single.

DR. ELLIOT said that he considered the case presented by Dr. Fuller a tubercular disease of the skin, described by the French under the name of

gomme tuberculeux—one which was not infrequently seen, and in which the tubercle bacillus was to be found.

DR. FORDYCE said that he agreed with Dr. Elliot's diagnosis, and thought the disease was the same as formerly described under the name of cold abscess.

DR. PIFFARD said that the disease was undoubtedly *scrofuloderma phlegmonosum*.

A Case for Diagnosis.—DR. BRONSON introduced a case for diagnosis that he had presented before the society at a recent meeting. The patient was a girl, seventeen years of age. The general health and bodily functions were in good condition. She seemed, however, of neurotic temperament and had attacks of hysteria. About two months ago she came to the Polyclinic complaining of an erythematous eruption upon one side of the face, which appeared a few days before. The whole right side of the face was affected with an intense erythema, somewhat vaguely defined at the edges and attended with slight swelling. It passed off in a day or two, but repeatedly returned. There were no pain or other subjective sensations and no desquamation. The attacks continued for six or eight weeks. About two weeks ago the patient exhibited a patch of erythematous redness upon the right shoulder and arm, saying that it began the day before as a patch the size of a dollar. The next day it covered the whole deltoid region, but the following day it was better. The next day the whole outer surface of the right arm was red and inflamed and very sensitive to the touch. It did not look like the erythema on the face, but more like a scratch or burn. The surface was not uniformly affected, but made up of a number of confluent patches marked at the line of contact with seams of deeper red color. The inclosed areas were grayish in color and looked on the point of vesication or exfoliation. Some excoriations appeared in two or three places. Three days after the appearance of the trouble on the arm a similar eruption appeared on the right thigh and disappeared in two or three days.

DR. TAYLOR said that the disease was very evidently, to him, a feigned eruption and produced by herself. This feigned eruption was not at all an uncommon one in hysterical women, and he had seen two cases of it recently in his private practice. These patients were not free agents, or responsible for their acts. The lesions produced were often severe enough to result in the formation of keloid. More frequently the lesions produced were erythematous, vesicular, bullous, or pustular. The agents used by these patients to produce the skin lesions were varied. Acids were frequently used strong enough to produce sloughing of the skin. Oil of mustard, red pepper, hot irons, sand-paper, etc., were also commonly used for such purposes. The great majority of these patients presented other marked hysterical tendencies besides that of destruction of the skin.

DR. BULKLEY agreed with Dr. Taylor in his remarks, in diagnosing the lesions presented in Dr. Bronson's case as, beyond doubt, a feigned eruption. These lesions were undoubtedly produced by the girl herself. It was not so very uncommon for hysterical girls to produce lesions like these upon their own bodies. He had seen a number of such cases, and referred to one which was particularly interesting and striking. It was in a young lady, a

daughter of wealthy parents, living in a neighboring city, who for a year or more had kept up a deception by producing abraded surfaces on the arms and face, probably with sand-paper. A number of medical men had seen her, and she appeared to take great interest in their view as to the supposed neurotic nature of the eruption, which was generally symmetrical, and on the arms appeared to follow nerve-tracts. After some weeks' observation the true nature of the lesions, which appeared several times, was determined, and they shortly ceased, under a placeboic treatment, the girl having been acquainted with the fact that her deception had been discovered.

DR. ALLEN said that, although he did not question the existence of artificially produced or feigned eruptions, and had indeed seen such cases himself, he could not agree with that diagnosis in the present instance. There were neurotic affections, he thought, as yet not well understood, occurring in just such hysterical young girls, which in one case produced a simple erythema of the skin: in another, where the nerve disturbance was more pronounced, a bullous eruption appeared, and in a still more severe form spontaneous gangrene occurred. He cited a case of the latter affection, recently observed by himself in a very markedly hysterical girl, where the lesions began as whitened areas of skin which became leathery and sloughed out, leaving very painful ulcers, followed by keloidal scars. Many of the lesions were upon the back, and new ones continued to appear for months. Besides general hysterical symptoms there were anæsthetic spots on the skin, and hemianæsthesia.

DR. MORROW said that while the case did not correspond in its clinical features or course with any of the recognized dermatoses, still he was not satisfied that it was a feigned eruption. Such a diagnosis was very convenient as a cloak for our ignorance when we met with a case of skin disease presenting such unusual features that it could not be readily named or classified. He did not deny the comparative frequency of feigned eruptions in hysterical subjects. The absence of an adequate motive was no evidence that the eruption was not artificially produced. We were, however, pretty familiar with the form and aspect of skin lesions artificially provoked for purposes of deception or otherwise. In many cases the nature of the agent employed, whether mechanical or chemical, might be recognized by the objective characters of the dermatitis. The application of acids or other chemicals, frictions with irritant substances, determined changes in the skin of a special character. He was not familiar with any agent which would produce an erythematous eruption persisting for two weeks without notable changes, as described by Dr. Bronson. Besides, surface irritation would not cause the deep-seated pain which seemed to be present in this case. He was inclined to regard the eruption as a neurotic erythema.

DR. KLOTZ diagnosticated the lesions as resulting from some vaso-motor disturbance, in consideration of the former occurrence of circumscribed œdema.

DR. BRONSON said that he was not surprised at the difference of opinion expressed, for the eruption was certainly a puzzling one. He had been pleased to hear that the conclusions arrived at by two of the gentlemen—those of Dr. Taylor and Dr. Bulkley—agreed with his own. When the erup-

tion upon the arm was first seen it was presumed that it must be of a neurotic character similar to that which had occurred upon the face, and which, beyond question, was neuropathic. But from the very first there was a suspicious look about the other eruptions which made him skeptical. They had decidedly the appearance of an injury effected by some external cause, whether caloric, chemical, or mechanical. There was an angular outline to some of the patches that could scarcely have been produced by other means than by the external application of some irritant. The epidermis also was more affected than it would be in ordinary spontaneous erythema. Moreover, the distribution of the affected patches was unlike what one would expect in an eruption dependent on nerve disease. It looked as though these patches had been produced by successive applications of the irritant, whatever it may have been. The speaker, however, was bound to say that there were some features which would seem to oppose this suspicion. In the first place, though the patient declared she was right-handed, the lesions occurred on the right side. It would be more natural to inflict such injuries on the left arm with the right hand. Again, it was difficult to understand how the patient could have controlled any irritant so as not to have produced more injury. Though the effects were not everywhere quite uniform, they were more nearly so than would be expected from the application of an agent as energetic as must have been used to produce such an inflammation. Furthermore, it was not easy to assign a sufficient motive on the patient's part to produce a feigned eruption. Perhaps Dr. Fordyce had suggested the only possible explanation—a morbid desire to create sympathy or surprise and to receive attention. With regard to the signs of spinal tenderness referred to by Dr. Allen, it was thought that too much attention should not be paid to them. The patient was certainly a highly neurotic, hysterical subject, and was very apt to squirm and wriggle when touched anywhere.

Morphœa.—DR. SHERWELL showed a case of morphœa that he had presented before the society on two former occasions (196th and 197th meetings). When he first presented the case some members of the society were in favor of diagnosing the case as sarcoma. The patient at that time had been taking arsenic internally for four or five days, but since then had taken no medicine, as it was thought best to leave off all treatment until the diagnosis of morphœa could be confirmed. The disease had been improving steadily and was virtually well. Dyschromia and atrophy, the characteristic features of receding morphœa, were now distinctly present.

DR. BULKLEY said that Dr. Sherwell's case was undoubtedly morphœa, but when first presented to the society the lesions showed remarkable signs of irritation, perhaps due to friction, treatment, or injury.

DR. SHERWELL remarked that the signs of irritation were not due to any traumatism or overactive treatment, but considered it at the time an example of one of those few recorded cases of morphœa which presented bulke or other lesions on its surface.

Lupus Verrucosus.—DR. KLOTZ presented a case of lupus verrucosus of the hand, with the following history: John B., forty-nine years of age, German, had an eruption of the right hand. It commenced at the tip of the middle

finger about sixteen years ago, while patient was working in an iron foundry. His present occupation was that of sand-papering furniture. The eruption spread over the dorsal aspect of the middle finger and over the larger part of the back of the hand. He was treated six years ago in the German Hospital, principally with the stick of nitrate of silver and salicylic-acid plaster, and almost cured. About six months ago the eruption began to spread again to its present dimension, somewhat larger than a silver dollar, with irregular processes toward the third and fourth fingers. When he presented himself at the dispensary, about three weeks ago, the entire surface was covered with dry, light-brown, hard and firmly adherent crusts, more scaly on the peripheral portions, which showed a bluish, firm infiltration, were not sharply defined, and kept their dark color under pressure. After the removal of the crusts the entire surface appeared uneven, warty; on the portion nearest the ulnar edge small, pointed, elongated papillæ of a reddish color could be distinguished, which now had disappeared. Within the patch numerous small, red nodules could easily be distinguished, which were less resistant than the other portions. The case was presented as one of *lupus verrucosus*, a mild form of *lupus*, occurring principally in the hand, to which Leloir, Doutrelepon, and others had called attention.

DR. ELLIOT said that the case was evidently one of *lupus verrucosus*, and not a representative of the clinical form of tuberculosis—*tuberculosis cutis verrucosa*.

Bullous Dermatitis and Intermittent Chloasma.—DR. ALLEN presented a case of bullous dermatitis of the backs of the hands due to burning by the sun, and marked chloasma of the face and neck, which was peculiar in having a very pronounced outline occupying both cheeks in a male, with a history of its spontaneous disappearance from time to time.

DR. BRONSON said that in all the forms of chloasma that he was acquainted with there was a gradual shading off of the dark patches into the normal hue of the surrounding skin. In this case the pigmented areas were as sharply defined from the light portions as in vitiligo. Moreover, it appeared as though the light portions were encroaching upon the dark by a rounded convex border rather than the dark upon the light. Altogether it seemed to him that the case corresponded more nearly to vitiligo than to the disease which he would recognize as chloasma. As was well known, the excess of pigmentation of the border in vitiligo was usually as prominent a feature of the disease as the loss of pigmentation in the center.

DR. MORROW said that the case was unique in that the chloasma had appeared a number of times and then rapidly disappeared. The sharp definition of the pigmented border was not, according to his observation, an unusual feature in chloasma.

DR. TAYLOR said he had just seen a case in private practice like the one presented by Dr. Allen. In this the chloasma appeared in summer and went in winter.

DR. SHERWELL diagnosticated the disease as one of chloasma combined with vitiligo. The margins of some of the patches were more sharply defined than he had ever seen in simple chloasma.

DR. BULKLEY had seen cases of chloasma as well defined in females but

less frequently in males, although it did occur on them more frequently than was generally supposed.

Herpes Facialis.—DR. KLOTZ presented a patient, Charles P., thirty years of age, a cooper. He began feeling ill five days ago, and then had a chill lasting five hours, followed by fever. The next day his face commenced to itch and to burn, and within twenty-four hours became covered with an eruption, accompanied by swelling and pain in the throat, the submaxillary glands, etc., all of which symptoms had disappeared again except the eruption. It covered the skin, and symmetrically both cheeks and part of the ears. On the right ear several well-developed groups of blisters filled with yellow fluid were situated, closely resembling those of a zoster, while on the face the blisters, mostly forming groups, were less developed; on some portions the skin was covered with soft, yellowish crusts, and others exhibited a moist surface, resembling eczema impetiginosum.

The patient said that he had a similar attack nine years ago, when he had repeated attacks of chills and fever, for which he took quinine. (He had had another attack of fever now without taking any medicine.) The case was presented to decide between the diagnosis acute eczema and double herpes zoster facialis.

Syphilitic Leucoderma.—DR. FORDYCE showed photographs of a case of syphilitic leucoderma. The patient had contracted syphilis about a year ago, and shortly afterward developed a papular syphilide, which, on disappearing, left patches of leucoderma.

DR. TAYLOR said that he was the first to describe such a case, in an article published in the Archives of Dermatology. The lesions were exactly opposite to the pigmentary syphilide, although many observers very much confused the two conditions. In syphilitic leucoderma there was first a deposit of pigment and then an absorption of it, leaving the white patches. This condition might follow the erythematous or papular syphilide, or the condylomata. The same thing might follow psoriasis. In the pigmentary syphilide a distinct pigmentation occurred without being preceded by other lesions, and was most apt to appear about the neck.

DR. BULKLEY said that he did not consider the photographs presented by Dr. Fordyce as representing a true case of syphilitic leucoderma, but rather a simple achromia following a syphilitic eruption and the result of the absorption of the deposit of pigment occurring in the syphilitic lesions.

DR. MORROW said that various abnormalities of pigmentation might result from syphilis. In syphilitic as well as other cutaneous dyschromias both achromia and hyperchromia were generally present. This association had led many writers to confound syphilitic leucoderma or vitiligo with the pigmentary syphilide. The former, which was quite common, represented a stage in the involution of syphilitic macules or papules; it was simply a posthumous expression of an anterior syphilitic eruption. The latter, which was comparatively rare, was a primary lesion occurring as the direct manifestation of the syphilitic diathesis; it developed without preceding infiltration or changes in the skin, and the morbid process consisted essentially in localized hyperpigmentation. He had seen cases in which the pigmentary syphilide was not confined to the neck, but was more generally distributed.

Correspondence.

SYPHILIS AND LEPROSY IN JAPAN.

To the Editors of the Journal of Cutaneous and Genito-urinary Diseases :

SIRS: . . . Regarding the subjects of auto-inoculability and interinoculability of syphilis, leprosy, and phthisis, I believe in neither. The *Bacillus lepræ* may be of *multiple* existence, and this might explain the period of latency. I think the Japanese custom of eating live raw fish has a value in defining the aetiology of leprosy. Syphilis in Japan is very extensive; most people are tainted, either in their own generation or through preceding generations; but it does not seem to be as virulent as in Europe—rather peculiarly modified, perhaps, through ancestral protection, so many having had it before.

Regarding the origin of these three diseases in Japan, ethnology may be important in defining their singularity. Were they *intercommunicable*, the ancient Aino-Japanese practice of tattooing, so general among the lower classes, should have determined the fact ages ago.

Dr. D. G. Brinton thinks ancient syphilis of Japan should be studied through "the bones of their old cemeteries," but ancestor-worship of Confucianism prohibits and interferes with its adoption. I have seen graves eight hundred years old still venerated and prayed over, and tapers lighted at them daily. He thinks that phthisis may have been imported, as into the Polynesian Islands (the Japanese have a Polynesian ancestry), and that leprosy may be indigenous, as in Nova Scotia, or have been introduced through Buddhism. "Ken" segregation of lepers in Japan is very old, antedating Buddhism, I think, which entered Japan, from China, through Corea, in 553 A. D., along with the numerous Corean immigrations, the disease, perhaps, preceding syphilis, as in Europe.

It is more plausible to suspect syphilis to have entered with Buddhism than that leprosy should have, for its priests are far from immaculate, and generally infected. I have treated many of them, and, with few exceptions, for venereal disease.

I do not think the advent of the Portuguese could have influenced the leprosy question of Japan. On the contrary, St. Francis Xavier and his embassy of Japanese youths may have implanted a Japanese syphilis in Europe, but not originally, for they reached Rome in 1585 A. D., and remained eight years and then returned. There was this Japanese, Portuguese, and European intermixture at the close of the sixteenth century.

Multiple neuritis, both toxic (charcoal gas) and malarial (climatic), confirms a diagnosis of leprosy neuritis in Japan.

Lepers are permitted to marry lepers, and their unions are sterile mostly.

It is not considered absolutely essential, from a sanitary standpoint, that dead bodies of lepers must be burned, as is the case with cholera dead bodies. This seemingly corroborates Beaver Rake's conclusion, antagonistic to Arning's, relative to the leprosy bacilli resisting influences of putrefaction and earth.

ALBERT S. ASHMEAD.

4 KING STREET, NEW YORK.

Selections.

Abortive Treatment of Gonorrhœa.

Two papers were read upon this subject at the Society of Practical Medicine in Paris on the 13th of February, 1890.

In that by Dr. Malécot the treatment by injections of nitrate of silver was discussed. He regards the prejudice against the employment of silver as unfounded, if it is properly applied. Certainly the strong solutions are dangerous, especially if they are used several days in succession. They may provoke discharge of blood, and their too energetic action may compromise the subsequent elasticity of the canal. Furthermore, with the piston syringe the sphincter may be forced and the caustic be uselessly injected into the bladder. He therefore recommends the olive bulb instillator, which is introduced as far as the muscular sphincter. The sensation of special resistance here felt serves as an indication that the instrument has gone far enough.

The patient first urinates, then the canal is to be washed out with a feeble broie-acid solution, and then the instillation made—the first day in strength of 1 to 50, and the following days 1 to 100 or 1 to 150, the solution being retained in the urethra for two or three minutes. The irritant action is only of short duration, and affects only the epithelial layer of the mucous membrane. In the intervals between the acts of urination it is recommended to wash out the urethra with some antiseptic solution—the permanganate of potash, resorcin, or bichloride, the latter not stronger than 1 to 10,000 or 1 to 20,000.

Dr. Malécot has obtained excellent results from the salicylate of mercury in strength of five centigrammes to 100 grammes of water, at a temperature of 30° to 40° C. It is a strong antiseptic without being painful. Internal treatment is not wholly neglected, sandal oil, copaiba, etc., being given in the belief that they undergo a change in the economy by means of which they become germicidal. Oppenheimer has shown that urine passed after the administration of thirty grains of copaiba sterilized silk threads charged with microbes. He has also followed Dreyfous in the employment of salol in daily doses of six grammes with the same object in view.

Following out this plan, an abortion of a recent gonorrhœa often takes place, and without danger. Only violent inflammation of the urethra should cause one to suspend the treatment. In some cases, without known cause, the method fails.

In the second paper, by Dr. Picard (*Journal de méd. de Paris*, March 9, 1890), the question as to the efficacy and harmlessness of abortive injections of the nitrate of silver are answered in the affirmative. If we examine into the action of a sufficiently concentrated solution of nitrate of silver we see that it acts upon the mucous membrane of the urethra just as the gonorrhœal virus acts, causing death and desquamation of the superficial epithelium. The difference between their actions and that which explains the efficacy of the treatment is the rapidity with which the silver works, destroying the epithelium at once, while the virus requires several days to effect the same

result. The success of the treatment therefore depends upon the promptness of its application. It should be made when the first symptoms appear—that is to say, before the appearance of pus. In practice it is at the time that the patient feels an itching sensation in the fossa navicularis, and perhaps notices a clear drop at the meatus, that the treatment must be instituted. A red meatus, with the lips swollen and everted, turgidity of the glans, and great pain, furnish contra-indications to the employment of the abortive method. If these parts are normal and the pus is not too abundant and thick, the silver may still be used. The solution he recommends is that of 1 in 25 or 1 in 30. More concentrated it becomes caustic, and the solid stick is not to be thought of, because it would leave a cicatricial stricture. The Langlebert syringe, throwing a recurrent stream, is recommended, but the author gives preference to the ordinary injection syringe. The pain occasioned is usually moderate. Twenty-four or thirty-six hours after the first injection, if the discharge persists, a second is authorized, provided the parts are neither red nor painful.

Buccal Blennorrhagia.

DELEFOSSE relates in the *Journal de méd. de Paris*, January 12, 1890, the instance of a married man, free from all symptoms of gonorrhœa for several years, who, after permitting suction of the penis (thinking thus to avoid the dangers of illicit intercourse), acquired a urethritis corresponding in every way to the clinical picture of gonorrhœa. The author thinks this case a proof that a man may contract gonorrhœa in a medium not infected with gonococci. It does not appear, however, that the acquired discharge was proved to be true gonorrhœa by the presence of gonococci. Since the patient had previously suffered from gonorrhœa several times, it is in no wise certain that there may not have been a latent disease. And, finally, it is not stated that the mouth of the prostitute was examined to exclude the presence of disease. It is stated that cases of so-called blennorrhœa of the mouth are only in reality stomatitis, produced by simple irritating agents rather than of specific nature due to the muco-pus of gonorrhœa.

In this connection it is of interest to note that Cutler (*New York Medical Journal*, Nov. 10, 1888) has reported a case in which after a *coitus ab ore* a young woman experienced on the following day a peculiar dryness and disagreeable taste in the mouth. On the third day the tongue and gums became swollen, on the fifth day it was impossible to eat, and a foetid, sanguinolent fluid poured from the mouth. False membranes formed and were found on examination to contain microbes which *resembled* gonococci. There was no doubt about the presence of gonorrhœa in the individual who had caused the stomatitis. Glycerin, subnitrate of bismuth, and chlorate of potash were employed, but the patient left before cure was complete.

Paget's Disease.

DR. DUBOIS-HAVENITH presented a case of the affection first described by Paget in 1874, at the Royal Society of Brussels, October, 1889, of which the following are the chief points of interest:

1. The disease began at the nipple and slowly extended to the areola and the neighboring skin.

2. The début had been four years ago.
 3. The nipple had completely disappeared and the eruption had come to occupy a region corresponding in size to a five-franc piece.
 4. The borders are sharply limited. The whole patch is the seat of a firm and hard infiltration.
 5. At several points the corium is exposed and bleeds at the slightest touch.
 6. Nothing in the aspect nor in the course of the lesion recalls the appearances or march of chronic eczema.
 7. All treatment (salves, plasters, and lotions) has failed.
 8. The glands corresponding to the region of eruption have remained free.
- The author now proposes to employ Canquoin's paste to destroy the growth.

He reviews the opinions of Paget, that the development of cancer occurs by virtue of the law of *locus minoris resistentie*; that of Duhring, that it is a disease *sui generis*, clearly distinct from eczema, and at the same time not true cancer of the breast, but a sort of intermediary affection; that of Brocq, that possibly different affections have been confounded; and finally that of Darier and Wickham, that it is a parasitic disease, being due to the presence in the interior of the epidermic cells of psorosperms. They place it in the group of parasitic diseases, to which the name cutaneous psorospermoses is given, and which includes *psorospermosis follicularis vegetans*, and possibly *molluscum contagiosum*.

Book Reviews.

A New Medical Dictionary. Including all the Words and Phrases used in Medicine, with their Proper Pronunciation and Definitions, based on Recent Medical Literature. By GEORGE M. GOULD, B. A., M. D., Ophthalmic Surgeon to the Philadelphia Hospital, etc. With Tables of the Bacilli, Micrococci, Leucomaines, Ptomaines, etc.; of the Arteries, Muscles, Nerves, Ganglia, and Plexuses; Mineral Springs of the United States, Vital Statistics, etc. Philadelphia: P. Blakiston, Son & Co.

THE evolutionary requirements of medicine have necessitated within the last few years a largely increased vocabulary for its proper expression. The extraordinary advances made in every department of medical science—the growth of specialism; the development of electro-therapeutics; the opening up of new fields of investigation in bacteriology, ptomaines, leucomaines, etc.—have led to the coinage of a vast number of words unknown to the dictionary of the last decade. Current medical literature abounds in medical terms and phrases for the proper comprehension of which, by the student and practitioner, a new medical dictionary is absolutely essential.

In the preparation of this work the author has incorporated with the classic terms of the older dictionaries the several thousand new words which have recently been introduced and accepted as permanent acquisitions to medical literature. The presentation of this mass of information in such a

condensed and most complete form has been effected by the elimination of useless or irrelevant terms, the framing of definitions in concise and accurate terms, the tabulation of large grouping of facts, and the systematized arrangement of definitions of words relating to the same subject under a common heading. Cross-references scattered through the work give the location of the chief and subordinate words. The work presents many features quite unique and of special value which can not fail to be appreciated. An examination of the work convinces us that the aim of the publishers to present "a handbook of sufficient scope to include everything of use to the general practitioner and student, and at the same time to be a compact, handy volume, giving the exact information desired at a quick reference," has been fully justified.

Contribution à l'étude de la trace indélébile du chancre syphilitique. Par le docteur A. L. MONIN, ex-interne des hôpitaux, lauréat de la Faculté libre de médecine de Lille. Lille: Imprimerie typographique de Bigot frères, 1889.

A GLANCE at the title of this work may occasion some surprise, since the general impression is that the syphilitic chancre in the majority of cases leaves absolutely no trace except a pigmented spot, which gradually disappears. The ulceration, if any, rarely involves the deeper layers of the skin, but is usually at the expense of the infiltrated cell elements rather than of the tissues proper.

The object of this study on the part of M. Monin is to demonstrate that the infecting chancre is most often followed by a cicatrix—a persistent trace which may be recognized as the anatomical signature of syphilis. An examination of the literature of the subject shows that the opinions of eminent authorities are absolutely contradictory upon this point. Ricord, Fournier, and many others assert that a cicatrix consecutive to a chancre is quite exceptional, while other observers of equally high repute, most prominent among whom may be mentioned Professor Leloir, of Lille, contend that the chancre is most often followed by a permanent cicatrix, frequently persistent through life, and which forms an element of retrospective diagnosis of the highest clinical value. This study of M. Monin is based largely upon an analysis of all syphilitics observed in the service of Professor Leloir since 1885. We have not space to pass in review the results of this analysis, or M. Monin's very interesting observations upon the aspect and characters of the cicatrix as modified by location, its value in differential diagnosis, and its importance from a clinical and medico-legal point of view.

He gives the following conclusions:

1. The infecting chancre leaves in its suite a cicatrix or indelible trace the frequency of which is demonstrated by our statistics. One may affirm that it may be found in nearly one half of all syphilitics.

2. The cicatrix, the aspect of which varies with the seat and nature of the tissues upon which it develops, is, one may say, characteristic, almost pathognomonic, upon the sheath of the penis. Here, indeed, its semeiological value, increases from its presence in the genital region, its much the most frequent seat.

In many cases where the cicatrix is keloidal it presents, by its peculiar raised aspect and its genital seat, a characteristic physiognomy (Leloir).

3. In cases of unrecognized syphilis, with doubtful manifestations, its identification is a priceless resource for diagnosis and prognosis.

4. Its importance in legal medicine, either for the establishment of its identity or as a means of affirming the existence of a syphilis denied by the inculpat, is evident from the whole of this study.

5. The infecting chancre in women, as in men, leaves a cicatrix—a trace less easy to identify, it is true, but which none the less exists.

Contribution à l'étude des accidents post-mortem du chancre infectant. Des réveils locaux du virus au niveau ou au voisinage immédiat du point d'inoculation primitif. Par CÉLESTIN PUCHE, docteur en médecine. Lille : Camille Robbe, 1890.

OF interest in connection with the monograph of M. Monin is the inaugural thesis of Dr. Puche on the posthumous accidents of the infecting chancre, or the local redevelopments of the virus upon the site or in the immediate neighborhood of the primary point of inoculation. This study owes its inspiration to Professor Leloir, whose ideas upon the nature of these accidents have been elaborated in his *Lectures upon Syphilis*, 1884, and in a communication made before the International Congress of Dermatology and Syphilography, 1889. These accidents embrace (1) the erosive papule, developing when the chancre is in process of healing or is just cicatrized; (2) the chancriform syphilome, with its diverse varieties; (3) syphilides not presenting the characters of the chancre, and occurring upon its cicatrix or in its neighborhood.

The first variety, representing the transformation of a chancre *in situ* into a mucous patch, was first recognized by Ricord and since by all observers.

The second variety, embracing lesions simulating perfectly the chancre and developing upon its site or immediate neighborhood, corresponds to the *ulcération redux* of Fournier and the indurated pseudo-chancre or relapsing induration of Hutchinson. For these accidents Professor Leloir has proposed the name of *syphilome chancriforme*. They possess a great clinical importance from their liability to be mistaken for chancre, to which they bear a most deceptive resemblance. Most of the cases of syphilitic reinfection which have been reported have been based upon a wrong interpretation of the nature of these lesions.

A curious thing which, according to Leloir, has escaped the attention of authors is that "the appearance of this syphilome often coincides with the outbreak of other syphilitic manifestations—crops of cutaneous and mucous syphilides, cephalalgia, and sometimes even fever." It may be either precocious or late in its development—within a few weeks or months after the chancre, or not until the second, third, or even the seventh year of syphilis. It may be resolute or disappear by necrosis, partial or complete, of the neoplasm, sometimes accompanied with necrosis of the surrounding tissues. It is to be differentiated from the infecting chancre by the fact that induration always precedes ulceration, and by the absence of the characteristic adeno-

pathies, except in cases where it follows soon after the chancre. The pseudo-chancere may relapse and manifest itself a number of times in the same spot. It may develop when the patient is under the full influence of an active specific treatment.

The third class embraces syphilides of a non-chanceric form aspect, occurring around or in the neighborhood of the chancre; more rarely upon its surface. They may be of the papular, papulo-pustular, gummatous, or ulcerous types. Their rare occurrence upon the immediate site of the chancre is explained by the sterilization *in loco* of the tissues, which renders them inapt for the germination of the syphilitic virus.

The clinical characters of these syphilides, which present nothing absolutely distinctive, are described in detail; their value from a semeiological and prognostic point of view, their ætiology and diagnosis, as well as their therapeutic indications, are given at length. Since observation shows that these accidents often resist the most active and prolonged antisymphilitic general treatment, and even develop in the course of specific treatment, a local treatment with the emplastrum de Vigo or the ordinary mercurial plaster is recommended.

Items.

Gonococci in Non-specific Urethritis.—Professor Straus records an instance of gonococcus detected in the urethral discharge from a youth aged sixteen, who had never had sexual relations with any woman, but who was addicted to masturbation from the age of twelve. Two days after indulging this habit to an unusual extent severe pain during micturition ensued, and was followed by well-marked symptoms of blennorrhagia. The discharge contained Neisser's gonococci absolutely similar to those found in the pus of a patient suffering from ordinary blennorrhagia. This case would show that Neisser's gonococcus may exist as a simple saprophyte, and that by means of slight irritation it may invade the epithelium and determine characteristic catarrh.—*Brit. Med. Jour.*, February 8, 1890.

Extirpation of a Seminal Vesicle for Tuberculosis.—In the *Centralblatt für Chirurgie*, February 22, 1890, Dr. E. Ullmann relates the history of an operation which he performed for tuberculosis of the right seminal vesicle secondary to tuberculosis of the epididymis. The patient, aged seventeen years, recovered rapidly from the effects of the operation, his general health being greatly benefited thereby.

The author believes the operation can be recommended in the following cases:

1. In primary tuberculosis of the testicle or epididymis where no suspicious symptoms are present on the healthy side, but where the seminal vesicle is diseased on the affected side.

If both seminal vesicles are diseased and one *vas deferens* healthy, it should be left undisturbed, both seminal vesicles, however, being removed.

2. In primary tuberculosis of the seminal vesicles. The impotency which remains after the operation can not be used as an argument against it, as in all cases of tuberculosis of the seminal vesicles it is remarked that impotency soon shows itself as a cardinal symptom of the disease.

Trophic Disturbances of the Skin in Neuritis.—Erlenmeyer (Centralblatt f. Nervenhilfkunde, No. 8, 1889) relates the history of a woman, aged thirty-four years, in whom a neuritis of the right median nerve developed as a sequel to diphtheria. The neuritis was attended with motor and sensory paralysis combined, with anidrosis and an ichthyotic change in the epidermis over the palm, the flexor surfaces of the fingers, etc.

Under appropriate treatment the affection subsided; it reappeared, however, several months later, to again disappear.

The author refers the trophic changes, anidrosis, change in the epidermis, coldness and paleness of the skin, to a paralysis of the trophic and vaso-motor nerves which are inclosed in the same sheath as the median. Another case is related by the same author of pain and hyperæsthesia along the course of the left median nerve, together with ichthyosis of the palm and flexor aspects of the fingers.

The neuritis in this case was probably of septic origin, having followed after a felon. After six months' duration it disappeared spontaneously; a return of the neuritis in this case was cured in two months, by the use of the constant current and salicylic acid internally.

Pustular Sycosis of the Whole Body in a Young Man.—Jonathan Hutchinson (Archives of Surgery, January, 1890) narrates a deplorable and extensive case of sycosis, in which not only the hairs of the beard were affected, but also those of the scalp, axillæ, and pubes. There were, indeed, pustules over the entire body in connection with the hairs. Although only twenty-two years old, he had been one year married, and he had never had any venereal disease. In early boyhood he had long been troubled by an eruption on the scalp, probably eczema. Of this he thought he had got quite well, and had remained so until the present outbreak, which began nine months ago. In the whiskers, chin, pubes, and eyebrows it was the common type of pustular sycosis; the hairs were in part destroyed, and many of those remaining were imbedded in pustules. On the scalp, however, the condition was much less acutely inflammatory, and all the hairs were matted together in a thick, dry, scaly crust like that of severe pityriasis or seborrhœa.

The treatment recommended by Hutchinson consisted of a tar wash and an ointment containing tar and mercury; these were to be used constantly, the patient remaining in bed, and epilation being practiced on the largest possible scale.

Tuberculosis Verrucosa Cutis.—Oscar Brugger (Virchow's Archiv, Band 119, Heft 3) narrates the history of a case of this peculiar form of tuberculosis of the skin. The patient, a man aged twenty-two years, had been affected for about eighteen years with numerous abscesses and ulcers on the right leg, which would heal after being subjected to curetting, but would again return. The leg was also the seat of papillary growths, which also returned after removal. On admission to the hospital the leg presented the following appearance (illustrated by a colored plate accompanying the article): The leg is enlarged and the seat of a number of old and new cicatrices, the skin hard, and the subcutaneous tissue resistant. On various parts of the leg, especially over the outer side of the foot, are numerous papillary growths, from one to three centimetres in diameter, and elevated above the *niveau* about half a centimetre. The microscopic examination of the excised growth is detailed at some length, and showed the presence of tubercle bacilli, giant cells, etc.

A guinea-pig, inoculated with a portion of the papillary excrescence, developed within six weeks a nodule at the point of introduction of the growth, and died within eight weeks of miliary tuberculosis.

The author believes that this is the first case of the kind in which the tuberculous nature of the affection has been proved by means of inoculation.

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A REMARKABLE CASE OF XANTHELASMA.

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XANTHELASMA is not so rare a disease that an ordinary case of it would be worth reporting. The case that is here detailed merits notice for two reasons: 1. On account of the extraordinary distribution of the lesions. 2. On account of the early age at which the disease began.

Michael M., aged five years, was admitted to my service at Randall's Island in May, 1890. He was sent into the hospital by the Society for the Prevention of Cruelty to Children, having been taken by them from his parents in a half-starved condition. From the child's sister I have been able to gather the following imperfect history: The eruption appeared when the child was three months old, without any antecedent disease, and came out all over at the same time. It is thought that no new lesions have appeared since then; that there has been no change in the size of the lesions, and that some of them have disappeared. The boy is said to have always been well, to have played about like other boys, and never to have been jaundiced. The sister denies the allegation of the society that the boy has been starved, and says that he always was thin.

Of course this history amounts to nothing. People of the class to which the boy belongs never observe closely. But it is probably correct as to the length of time that the disease has lasted, and as to the non-occurrence of jaundice.

Examination of the boy reveals a very extraordinary condition of affairs—one that will be better understood by reference to the accompanying chromo-lithograph than by any word picture I can give. I shall only supplement the picture by saying: The whole body of the boy is occupied by a disseminated efflorescence, no part being spared except the hands and feet

and scalp. The lesions are about the size of a split pea, or a little smaller, are soft to the touch, and have a central depression. Upon the face, trunk, shoulders, and lower part of the legs they are discrete, and scattered about without any particular arrangement. Upon the extremities the lesions are crowded into patches of various sizes and shapes, with normal skin between them. Even in the patches the lesions are distinct. They touch each other but do not coalesce. The distribution of the lesions and of the patches is quite symmetrical. The color varies from a lemon-yellow in the discrete lesions on the shoulders to an orange-yellow in the patches. About the joints the color is reddish-brown.

In the right eyelid are well-marked, typical xanthomatous patches of a chamois-leather color. The lower lid is occupied by one continuous patch, running from the inner to the outer canthus. On the upper lid there is a small tumor. The left lid is but very slightly affected. Upon the back of the neck and the upper part of the back are a number of light-brown pigmentary spots, which the sister says are the remains of some lesions that have disappeared. Scattered about the trunk are a number of depressed scars, apparently the remains of a recent varicella.

The boy is very thin, of blonde type, and the skin is pale. Apart from this there is nothing abnormal. His appetite is good, his digestion is in fine condition, and his urine contains neither albumin nor sugar. Upon the left buttock there is one vascular nœvus.

In 1882 the subject of xanthelasma was investigated by a committee of the Pathological Society of London. At that time there were only eight cases of the disease reported as occurring in children, and by the committee it was said that the eyelids of children were not affected. Subsequent experience has shown that they were wrong in regard to the lids. Since 1882 a number of new cases have been reported. A complete list of the cases up to 1883 was published by Eichhoff in the *Monatshefte für prakt. Dermat.* for that year.

In regard to the age at which xanthelasma occurs, most cases have been met with in adult life. Barlow published a congenital case in *Transactions of the Pathological Society of London* for 1884, vol. xxxv. In the same year Eichhoff published in the *Deutsche med. Woch.*, vol. x, the account of a case beginning in the second month. This makes my case the third in point of early age. Crocker mentions a case in a boy of two months which had lasted for six months. This is so evidently a misprint that I take it that the child was two years old instead of two months.

Barrs (*Lancet*, 1888, i, 923) reports a case at one year. Lehzen and Knaus (*Virchow's Archiv*, 1889, cxvi, 85) report two cases in the third year and one case in the fourth year. Poensgen (*Virchow's Archiv*, 1883, xci, 350) reports a case in the fifth year. In this case some of the tumors were excised, but returned in the same place.

Anderson and Eichhoff report cases nearly, if not quite, as extensive as mine, though their distribution was not identical. Barr's case was supposed to have followed some general eruption, probably measles. In a case reported by Hardaway (*St. Louis Cour. Med.*, October, 1884) the lesions on the chest followed along nerve tracts like the lesions of zoster.

Various theories have been advanced to account for the occurrence of the disease, but there has yet appeared no one that is perfectly satisfactory. Hepatic disease, diabetes, hereditary influences, diathetic conditions, embryonic cells left in the skin—each and all have had their advocates, but no one is sufficient to explain all cases. For the present we must be content to stand and wait.

In the way of treatment we have no sure resource save the knife and electrolysis. The latter is the more preferable of the two. In so general a case as mine, neither plan would be applicable. Besnier (*Jour. de méd. et de chir.*, April, 1886) reports good results from the administration of phosphorus in cod-liver oil, giving one milligramme per day, and increasing the dose each day by a quarter of a milligramme until three milligrammes are taken. After fifteen days this is stopped and turpentine is given. Stern (*Berlin. klin. Woch.*, 1888, xxv, 393) tried this plan without success, but succeeded in removing patches of the disease from the eyelids by the use of a ten-per-cent. solution of corrosive sublimate in collodion.

My friend Dr. John A. Fordyce has kindly consented to make a microscopical examination of sections taken from this case, and to report upon them and upon the pathology of the disease in a subsequent number of this Journal.

A CASE OF OBSCURE DISEASE OF THE BLADDER TREATED BY SUPRAPUBIC CYSTOTOMY AND PROLONGED DRAINAGE.*

By L. BOLTON BANGS, M. D.,

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THE following history of a patient who has now been under my care for over a year presents some features which are uncommon and which I have come to believe are due to a primary tubercular deposit in the prostate gland, thence extending to the walls of the bladder. In order to appreciate the difficulties of the case it may be necessary to give the history somewhat in detail:

N. L. H., aged twenty-seven, native of the United States; wheelwright by trade. He came under my care in January, 1889, and at that time gave no pulmonary, cardiac, renal, rheumatic, malarial, or specific history. His gen-

* Read at the fourth annual meeting of the American Association of Genito-urinary Surgeons, June 3, 1890.

eral health has always been good, and he has been a moderate user of alcohol. He has never had gonorrhœa ; has never had intercourse ; and masturbated only moderately in his boyhood. For some months before any disorder of his health appeared he had become attached to a young woman, and at frequent intervals was subjected to great and prolonged sexual excitement. The first thing that he noticed was a scalding pain during urination, which appeared about three years ago (in 1886). Three weeks after this began blood appeared in the urine, coming at the beginning of each act of urination, the urine becoming clear toward the end of the act. This was particularly so in the morning on rising from bed, and the evening urine of the same day would be quite clear. He felt no unusual desire to urinate, and the pain on passage of the blood was not so marked as at other times when the urine was clear. Gradually, however, frequent urination came on, and the patient noticed that a drop or two of clear blood would follow the urine, say, "*nearly* every time," and that there would be a painful and spasmodic contraction of the bladder at the end of urination. Ten months after his troubles first began he had another series of hæmorrhages, in which the quantity of blood was relatively large, say a teaspoonful, occurring every morning for a week. Since then he has had no free blood, but at times there has been a slight bloody tinge of the urine toward the end of the act of urination. The pain that he first complained of was at the head of the penis—sharp and lancinating in character, together with a dull aching pain in the perinæum. At first the intervals of urination were about every two hours, there being occasional periods in which the symptoms would be less intense. The intervals gradually lessened so that he had to urinate every half-hour, and sometimes as often as every five minutes. He went on in this way, being treated at home by medicines and the occasional passage of sounds without any relief.

In April, 1887, he sought relief at the Massachusetts General Hospital, Boston, where he was etherized and examined for stone. In August of the same year a stricture in the mid-penile urethra was operated upon. His bladder was washed out ; he was treated by electricity ; injections were made as often as once a day for three or four weeks into the deep urethra ; iodoform in oil was also used, and treatment in various forms was carefully and conscientiously used. In June, 1888, he was examined by the cystoscope on three different occasions, and a diagnosis of a tumor of the bladder was made.

On July 12th of that year the patient was again etherized, a perineal section made, and his bladder explored without result. A drainage-tube was then inserted, and left in for five weeks, his bladder being daily washed with boric-acid solutions. After being five months and a half in the hospital at that time, he was sent home in about the same condition as when he entered.

About a month before he came under my observation he had begun the use of solutions of cocaine in the deep urethra and in the bladder. These gave him some relief, and he applied them as often as four times a day. With the aid of cocaine he was able to retain the urine from three quarters of an hour to an hour. Before that time his urination had been as at the beginning of this treatment—namely, about every five minutes.

Present Condition.—He is tolerably well nourished, but pale and anæmic; no symptoms of pulmonary, cardiac, or renal disease ; appetite good ; bowels

fairly regular; some pain on movement of the bowels referred to bladder by the patient. Has no emission or discharge from penis while at stool, nor at any other time. In the perinaeum is a cicatrix—from the operation referred to in the history—thin and blue in color, and evidently not solidly healed.

On the 25th of January, 1889, the day after his admission to St. Luke's Hospital, where I had sent him, he was examined, and it was found that he had strictures of large caliber—one of 26 French at two and a half inches, and one of 24 at three inches. His urine was acid, specific gravity 1.020, fifteen per cent. albumin, no sugar. Microscopical examination showed that it contained pus, blood, bladder epithelium, but no kidney elements. He was examined for stone with negative results. It was noticed that there was extreme sensitiveness in the prostatic urethra, but no abnormal conditions of the walls of the bladder were found. Reasoning that possibly the strictures of large caliber might have some relation to the symptoms referable to the bladder, the patient was etherized and the strictures before noted were divided by internal urethrotomy to 34 French. The deep urethra and bladder were again examined while the patient was under ether, but with negative results. He was carefully irrigated by warm borosalicylic solution, and put to bed. In the evening he had a profuse hæmorrhage from the urethra, which was controlled by an ice-bag and pressure.

On the 30th, five days later, a sound was passed, and again followed by severe hæmorrhage, which required the use of pressure and the ice-bag.

A week later the sound was again passed, but it produced severe bleeding, and after that the sounds were omitted. On the 13th of March a sinus appeared in the old cicatrix, and from this a few drops of urine escaped with each micturition. The patient had some amelioration of his symptoms, but pain and frequency of urination continued. He required opium to control the pain, and the irrigations of the bladder and instillations of nitrate of silver which had been employed were stopped, as they seemed to have no effect whatever upon his bladder symptoms.

In March, 1889, it is noted in the history that although the patient's general condition has improved somewhat, he is obliged to urinate every half-hour, and that the pain increases at night. I have no explanation of this latter symptom. At this time his bladder would not hold more than an ounce or an ounce and a half of fluid by careful injection. Repeated searching of the bladder by manipulation, sounds, searching instruments, and inspection by means of the cystoscope failed to reveal any cause for this persistent pain and frequent urination.

By the rectum nothing could be found excepting that at one particular point in the middle line of the otherwise normal prostate there was an exquisitely sensitive spot, pressure upon which caused him to complain, and produced the "spasm" always associated with his acts of urination.

The cystoscope revealed only the hyperæmic mucous membrane, and nothing more. His intervals of urination were now about every twenty minutes. Sometimes he would have relief for an hour, but the average was about every twenty minutes.

I then had him come to my office every day, and tried, by careful and gentle irrigation of the bladder, and by occasional applications of varying

solutions of nitrate of silver to the sensitive places, to relieve him. The irrigation of the bladder with a weak solution of bichloride of mercury gave him relief, and diminished the pus in the urine; but there were two sensitive points—one at six and a half to seven inches, and the other at eight and a half inches from the meatus—which seemed to be irritated by the catheter and by the injected fluids; so much so that after a fortnight's persistent effort I had to desist. He complained that although the washing seemed to give him relief in some respects, yet it "stirred him up," and he had more pain at these particular places. His general health improved somewhat under the tonics and the gentle exercise in the open air which I compelled him to take; but the symptoms of frequent and painful urination and occasional appearance of a few drops of blood in the urine held on with the most exasperating persistency. I tried all sorts of things: hot water, various astringents, injections of cocaine, cocaine and antipyrine, capsules, suppositories, balsams, sedatives of all kinds, but without avail.

Toward the end of May, 1889, the cicatrix in the perinæum reopened and a few drops of urine came through, but only when he had a more than usual violent paroxysm of tenesmus. During the interval in which I was obliged to desist from washing the bladder, pus appeared in his urine, but it did not seem to be associated with any aggravation of the symptoms of pain and frequency. It may be remarked here that the use of cocaine lengthened the interval between his urination slightly, and it did have some effect upon the tenesmus or, as he termed it, "spasm." These injections seemed to give him the greatest relief. If he was on his feet two or three hours a "spasm" was certainly produced, the pain was increased, and then he would have an increase in the frequency of urination, together with a few drops of blood. By placing the cocaine solution at the point noted in the history he obtained considerable relief, but the more he moved about the more pain he had.

Toward the end of June, 1889, I sent him home to the country with a letter to his doctor directing him to continue the treatment, and if his symptoms persisted till the autumn, to send him back again for further exploratory operations.

On the 6th of November, 1889, he returned to my care. The symptoms of frequent and painful urination, the pain referred to a point above the pubes, and also to the perinæum, had again become more intense.

Further examinations of the lumbar regions, of his bladder, and his urethra, in every conceivable way, showed nothing to account for the persistency of these symptoms. Accordingly, on the 9th of November he was etherized, and I made a perineal opening through the old cicatrix. The patient's superficial veins were all congested, bled easily, and, as the incisions were made through the tissues, it was evident that he had some tendency to hæmophilia. The bladder was carefully explored digitally, and the only abnormality perceived was that its walls were hypertrophied and its capacity greatly diminished. Careful examination was, however, made of the tender points in the prostatic and membranous urethra, but no ulceration, thickening, etc., could be detected. Immediately after the operation a drainage-tube was inserted, with the idea of again draining the bladder, but when he recovered from the ether narcosis it was found that the tube caused a great deal of pain in his

bladder and perinæum. It was necessary to retain the tube with packing around it because of the continued venous hemorrhage, and his pain was relieved by suppositories of opium. After the hæmorrhage was controlled the tube was removed, and, in order that we might obtain for him the best possible results of drainage, the wound, which granulated with tolerable rapidity, was kept open from time to time by probing and daily packing, etc. While the drainage through the wound was maintained the patient had considerable relief from pain, but, in spite of it, he continued to complain of these spasms, and I finally allowed the wound to heal up. It seemed to me that when the urine or instruments reached a certain point in his urinary passage pain was experienced and violent paroxysms of tenesmus immediately produced. He had various forms of treatment from that time on, such as ice-bags to the lumbar spine, injections of iodoform emulsion, etc., without much relief.

Believing that I had not arrived at the cause of this man's affliction, and not having any faith in further exploration by the cystoscope, I determined to see, if possible, the inside of the bladder. Accordingly, on the 12th of March the patient was etherized and a suprapubic cystotomy performed. The technique of the operation was the usual one, assisted by Petersen's bag. By the aid of specula and the electric light the whole surface was easily inspected. The entire mucous membrane of the bladder was deeply congested and very much thickened. The bladder walls were also hypertrophied, and particularly a portion of the posterior wall slightly to the right of the median line near the summit. Here it was estimated to be half an inch in thickness and was slightly nodular to the touch. On inspection of this part, numerous papillary tumors were found, the largest not over an eighth of an inch in length and narrow at their bases. On touching them, they were easily flattened out, and it was only relatively to the neighboring bladder tissues were they perceived to be sufficiently dense to be called nodular. Scattered among them were a few minute elevations resembling miliary tubercles in color and size. The largest of these tumors, and the only salient one, was removed with forceps and scissors for histological examination, while the rest were thoroughly cauterized with Paquelin's cautery. The lobes of the prostate were not perceptibly enlarged. On pressing the gland with the finger, a few drops of pus exuded from the prostatic urethra, but from just what point or locality in the prostate could not be positively ascertained. The internal orifice of the urethra was carefully inspected, and, by means of one finger in the rectum and another in the bladder, the prostate and urethra were carefully palpated, but without determining any further pathological condition. It was observed that when one point in the prostatic urethra was touched by a piece of sponge which was introduced on a clamp, a convulsive contraction of the bladder and of the abdominal muscles immediately took place. This seemed so remarkable, inasmuch as the patient was deeply under the influence of ether, that at first I thought the observation was an incorrect one. Therefore I repeated with the delicate sponge the mopping out of the prostatic urethra, and immediately produced this convulsive contraction of the bladder and abdominal muscles. I called the attention of the bystanders to this phenomenon and reproduced it at will with instruments and finger. This par-

ticular point seemed to me to correspond with the sensitive area which I had determined by examining the patient through the rectum during the long time that he had been under my observation, but, strange to say, no lesion could be observed or felt at this place. We could look into the prostatic urethra by drawing the tissues apart by means of specula, forceps, and the fingers, but only a hyperæmic mucous membrane was to be seen; nor could any lesion be felt by the most careful manipulation. The point of Paquelin's cautery was introduced into this region and the surface carefully cauterized, together with one or two other points where the mucous membrane covering the prostate gland was markedly hyperæmic. The bladder wound was not closed, but the aponeurotic and muscular layers and skin were united separately, leaving a space at the lower angle of the wound where a medium-sized drainage-tube—say, 30 French—was introduced into the cavity of the bladder, being left long enough to be led into a bottle placed at the side of the patient's bed. After a lapse of twenty-four hours, drainage was well established by means of siphoning. If the tube was carefully surrounded by iodoform gauze in the wound, the drainage was perfect, and the bed-clothing was kept dry. The patient was at once relieved from the former pain excepting when the tube got stopped by a clot, and then everything was expelled by the powerful and painful contraction. Thus he went on comfortably, suffering only when the tube became clogged or was removed. If even a few drops of urine entered the urethra, he immediately had a spasm and groaned with pain.

On January 9, 1890, without any apparent cause he had a subacute attack of epididymitis (left side) which resolved in about nine days, leaving no sign of tubercular deposit.

On the 23d of March I left the tube out for a few hours to test the question, but immediately the old pain and tenesmus returned and it became necessary to replace the tube; or, if the tube was inserted too far, he suffered great pain and had these involuntary contractions. If it became clogged so that urine accumulated in the bladder, the same thing occurred.

On the 26th of March, when examining him by the rectum, I noticed for the first time small nodules in the right lobe of the prostate. As the drainage instituted at the time of the operation gives him comparative freedom from pain and dysuria, it has been maintained to the present time. By arranging the utensil or urinal into which the drainage-tube empties at a level below the pubic opening, he is able to be up and about the ward, and in a few days will be sent to his home in the country still draining.

In reviewing the history of this case it will be observed that an uncommon feature in it is the fact that, although pain and sensibility had been for nearly four years referred to the prostatic region, the only tangible tubercular deposits were found in the posterior wall of the bladder near its summit.

The most careful examination, even after the bladder had been opened and the region brought within reach of the eye and touch, could not determine any pathological change excepting the hyperæmic mucous membrane

and the few drops of pus whose source could not be found. Under such circumstances it might easily have been said that the man was suffering from some extreme degree of functional disturbance following prolonged sexual excitement; but, from the progress of the case, together with the fact that elsewhere in the bladder tubercular deposits did exist, there can be no doubt that the same process was at work in the prostatic regions, although it could not be made tangible or determined. It is true that we have failed to find the tubercle bacillus either in the urine or in the minute tumor excised for examination, but the clinical features are such as to make it positive, at least in my opinion, that the disease is one of slowly progressive tuberculosis. Another interesting feature is that this is a case of primary tuberculosis of the bladder, which may yet extend by way of the ureters to the kidneys. In this respect it varies from the ordinary course of genito-urinary tuberculosis, which has been declared by various authorities to be usually from above downward—that is to say, *primarily* in the lungs or kidneys and secondarily in the bladder. In opposition to this generally accepted view, my case is in accord with a view expressed by Cayla in his thesis published in the *Gazette des hôpitaux*, February 4, 1889, where he asserts that renal tuberculosis is secondary to a primary focus of tubercular infection in some other organ or tissue—lungs, skin, digestive or genito-urinary.*

My case also further supports him in opposing the theory of infection by sexual contact, and adds a clinical observation to his series of experiments performed upon animals (“into the anterior parts of the urinary tracts of which he injected pure cultures of the tubercle bacillus without causing within fifty days any tubercular manifestations in the parts” †), for, it will be remembered, my patient had never had sexual intercourse. It is probable that the lungs and kidneys in this man were capable of their usual vital resistance, whereas the prostate, having been rendered chronically hyperæmic by the prolonged and frequently repeated sexual excitement to which he had been subjected, had lost its resisting power and easily formed a nidus for the development of a tubercular focus, slight indeed at first, but enough to excite an already hypersensitive nerve filament or so, and not enough to be appreciated by the hands of the surgeon.

In further opposition to the theory of the downward course of tubercular infection I may quote a discussion by Hartmann of a case demonstrated by Parmentier, of Paris (*Bulletin de la Société anatomique*, No. 15), in which the kidney was completely broken down, the ureters involved to a great extent, while the bladder showed a few superficial ulcerations, and none of the other related organs were at all affected.

Hartmann thought that the superficial ulcerations in the vesical surfaces were not necessarily of later origin than the renal tuberculosis, nor

* *Annual of Universal Med. Sciences*, 1889.† *Ibid.*

did he regard as proved the theory of the downward invasion of the urinary tract. Of nineteen cases, he states that in seven the tuberculosis was general throughout the genito-urinary tract; of the other twelve, six showed renal tuberculosis associated with tubercular cystitis, while the other six presented healthy kidneys. The tubercular foci in two were prostatic and in the other four in the other genital organs (*Annual of Universal Med. Sciences*, 1889).

One word as to the procedure for his relief. The advantages of the suprapubic operation, and also, in this particular case, of the suprapubic drainage, are obvious. Of course the advantage over the perineal drainage is explained in this case by the presence of that exquisitely sensitive point in the prostatic urethra which tolerated nothing and which was as much irritated by a few drops of urine as it was by a soft, flexible rubber tube.

Furthermore, the ocular inspection of the inner wall of the bladder enabled me to determine that which ordinary digital examination and inspection by means of the cystoscope had failed to reveal—namely, the existence of an organic change near the summit of the bladder. I am willing to admit that possibly my skill with the cystoscope was not sufficient, or that perhaps the fluid medium which I employed at the time of my explorations was not clear enough to enable me to see these miliary tumors, but in this connection I may be permitted to call attention to the fact that he had been explored by good and skillful men in Boston, who had used cystoscopy without result.

Finally, I wish to call attention to the extraordinary reflex phenomenon as demonstrated by gentle pressure in the prostatic urethra after the bladder was opened. It seems extraordinary to me that while the patient was fully under the influence of ether the reflexes of the spinal cord should be so pronounced, and indicates to me still more positively that irritations in the urethra are capable of exciting greater functional activity than we usually conceive of.

31 EAST FORTY-FOURTH STREET, NEW YORK.

A URETHROTOME FOR CLOSE STRICTURE OF THE PENILE URETHRA.*

By J. BLAKE WHITE, M. D.,
Physician to Charity Hospital, New York.

IN the performance of internal urethrotomy most surgeons prefer the mode of making the incision from behind the stricture forward because it is the most certain and effectual proceeding. The incision

* Read before the fourth annual meeting of the American Association of Genito-urinary Surgeons, at Altoona, Pa., June 3, 1890.

is carried in this method solely through the morbid tissue, and little, if any, risk is run of wounding sound mucous membrane. When the incision is made from before backward, a fold of healthy mucous membrane is necessarily pushed forward by the blade and cut, together with the stricture, thus occasioning, at times, very troublesome hæmorrhages. In the course of my experience I have noted that very little bleeding follows the incision of a urethral stricture solely, but that the hæmorrhage will always be in proportion to the degree that the incision involves the surrounding healthy structures. With the instrument which I take pleasure in presenting I have been enabled to remove entirely a stricture without hæmorrhage, and to subsequently introduce as full caliber a sound as the proportionate relation between the circumference measurement and the caliber of the urethra will permit, as suggested and practically demonstrated by Dr. F. N. Otis.

The use of my urethrotome does not require any dilatation beforehand, as in the case of some others; but, with the exercise of a little skill, it may be made to pass as close strictures as are likely to be seen in the experience of any of us. To meet such conditions is certainly an advantage, and any instrument designed in accordance with this requirement is rendered far more useful. In referring to the necessity for cutting strictures, our distinguished *confrère*, Dr. Keyes, aptly states, in the excellent article upon Internal Urethrotomy, by Sir Henry Thompson, which he revised in Holmes's Surgery, that "the indication for a cutting operation is not that the *stricture is of very small caliber, but that it is non-dilatable*"; and I think he very satisfactorily covers the ground.

My first experience with this instrument was with a case of stricture in my service at Charity Hospital, presenting such a small caliber as to render the introduction of a fine filiform bougie barely practicable.

The instrument possesses a very much smaller staff than the ordinary Maisonneuve and is designed to operate from behind the stricture.



It consists of a double cannula, one fitting within the other. The distal end of the outer cannula has a bulb, *b*. To the end of the inner cannula is fastened a filiform bougie, *r*, and a grooved prominence, *p*, which serves as a sheath for the blade, *m*. To the blade is attached a delicate rod constructed small enough to freely play through the inner cannula, and, by manipulation at *c*, it can be made to traverse back and forth between the bulb, *b*, and the sheath, *p*. At *d* there is a graduated scale which serves to indicate the amount of stricture-tissue involved and to

regulate the distance the knife is to be withdrawn in order to divide the stricture.

When about to operate, the bougie and smaller cannula with sheath and blade are urged beyond the stricture, the first acting as a guide and preventing the formation of a false passage. The outer cannula is then pushed down till the bulb, *b*, lies anterior to the stricture, serving the purpose of firmly holding it between *p* and *b*. The blade is then withdrawn from its sheath, *p*, to the bulb, *b*, and again pushed back to *p*, thus severing completely the stricture without wounding adjacent sound mucous membrane. No hæmorrhage follows the operation, and it will be noted that the greatest degree of accuracy of incision can be attained.

CASES OF SUCCESSFUL OPERATION FOR BULBO-MEMBRANOUS CLOSE STRICTURE BY INTERNAL URETHROTOMY.*

By E. R. PALMER, M.D.,
Louisville, Ky.

MR. HARRISON in his Lettsomian lectures, Dr. Keyes in his admirable text-book, and a number of our best writers, among them Dr. Stein, of this association, have declared in the matter of operative treatment in stricture of the urethra of close caliber, and especially where such obstruction is somewhat deeply situated, that perineal section should be done along with internal urethrotomy, and that not because of its offering any greater assurance of permanent cure, but rather as a precautionary measure against infiltration of urine and urine fever. With exceeding deference to the opinions of the gentlemen named, I desire to present a brief *résumé* of twenty-two cases coming under this head wherein internal urethrotomy alone was done, detailing a few of the cases, and giving the sum of results obtained in the whole number.

CASE I.—W. D., youth of nineteen, presented with a narrow meatus and two close strictures—one at two inches and a half, another at five inches. Urine passed by hair-like stream. Etherized, meatotomy done, then a slender Maisonneuve staff passed over a filiform that had been introduced with much difficulty, and the blade pushed its entire length and withdrawn. An Otis then passed as far as it would go, dilated to 34, its knife pulled all the way out, and the instrument further dilated to 37. Slight hæmorrhage only. A catheter passed into bladder, and it filled with 1-to-20,000 hot bichloride solution, which, after withdrawal of catheter, the patient voided voluntarily. Ether caused much nausea. Whisky, followed by a hypodermic of morphine, was given and the patient put to bed. No medicine. Complete recovery; 32 F. sound used for months afterward. Patient lost sight of.

* Read at the fourth annual meeting of the American Association of Genito-urinary Surgeons, at Altoona, Pa., June 3, 1890.

CASE II.—Chris D., colored, aged twenty-six. Circumcised for extreme phimosis; had an almost impermeable strictured condition of the entire penile urethra. Operated on in colored ward, City Hospital, under ether. Filiform passed after nearly an hour of ineffectual striving. Chief obstacle at bulbo-membranous junction. Maisonneuve blade carried to the bladder, followed by the Otis back as deep as possible, cutting to 32. Silk catheter tied in bladder, and warm washing with weak bichloride and boric-acid solution ordered. Ordered ten grains of boric acid every three hours. Catheter withdrawn second day, and 28 F. curved sound passed. A severe chill followed, but fever subsided with no ill effect, and patient left hospital able to pass 26 F. curved easily. I found on inquiry that the boric acid had not been given.

CASE III.—C. S., middle-aged, a drunken German shoemaker. First seen in bed, his clothing and bedding reeking with the odors of the urine that dripped continually from his penis. Inquiry brought out that this condition had been gradually developing for thirteen years. Examination externally showed the entire penile urethra the seat of a series of fibrous stricture rings. Boric acid, fifteen grains every three hours, was given for twenty-four hours, and then, without anæsthesia and after repeated failures, a filiform was carried into the bladder. The Maisonneuve-Otis back to bulb to 33, dilating afterward to 36.5; hot bichloride and boric-acid washing, with boric acid internally; no fever; result perfect. Last fall, three years after operation, passed 29 F. curved into bladder with perfect ease.

CASE IV.—T. E., aged twenty-six, nickel-plater. Close stricture at bulb; boric acid internally. Maisonneuve, followed by Otis, washing, and rest in bed. No hæmorrhage of any amount; no fever. Four weeks later passed 28 F. curved easily into bladder.

CASE V.—John W., aged twenty-six, tobacco handler. Same conditions of urethra as in previous cases, and same series of operations, cutting finally to 32 and dilating to 38. Left my office at once for his home in a coupé, and urinated before I reached there. Had previously been in the habit of trying to urinate every half-hour day and night. Could not take boric acid; complained that it nauseated him. Second day a chill, with temperature of 105°. Bladder immediately distended with the warm antiseptic wash, the patient being required to void it after withdrawal of catheter. A hot rectal enema was also given; fever rapidly subsided. Quinine given freely, followed by five-drop doses of oil gaultheria. On the fourth day passed 29 curved easily its entire length. Another chill followed. Four days later discharged well, passing a full stream. Two years and a half later his brother, on casual inquiry, reports him all right.

CASE VI.—Young man, a roustabout, came into my office one night, with retention. Examination showed close stricture five inches back; filiform, Maisonneuve and a washout, a gift of a handful of boric-acid tablets, and the case never seen afterward.

CASE VII.—N. J., aged twenty-four. Close stricture five inches and three quarters back, cut over filiform with Maisonneuve; hæmorrhage slight. On second day passed 29 F. curved, followed by little hæmorrhage. Two days later—that is, the fourth day—the same sound was followed by quite profuse

hæmorrhage, as was also each succeeding urination for twenty-four hours. No more sounding done ; each washing followed by some bleeding. Eight days after operation a chill ; quinine given ; no more hæmorrhage. Eleven days after operation sent home well. Little less than two years subsequent reports at office absolutely well.

CASE VIII.—W. E., bricklayer, aged thirty-five. Close stricture six inches back. Cocaine, four-per-cent. solution, used ; cut with big blade of Maisonneuve only. Can now pass 27 F. curved easily into bladder.

CASE IX.—B. P., drummer, aged forty-six. Habits bad ; constitution delicate. Close stricture of penile urethra anterior to bulb. Maisonneuve only. Five months returned recontracted ; cut again moderately with Otis, given a 24 F. sound straight, and discharged. Prospects of cure not good, owing to habits, etc.

CASE X.—G. Q., railroad switchman. Called, passing urine *guttatim* ; history of long standing, stricture growing steadily worse. Exploratory examination ; finally got a filiform into bladder. Rather than postpone, emergency so great, did full operation at once. No trouble afterward. Six months later returned with a twenty-dollar bill as a token of gratitude for cure.

CASE XI.—J. S., aged twenty-nine, tobacco stemmer. Stricture close to bulb, of nine years' standing ; had been cut in St. Louis in 1880, with recontraction to almost impermeability at the bulb. Usual treatment by me, December 29, 1888 ; April 15, 1890, nearly fifteen months after operation, passed 29 F. curved without any difficulty or pain.

CASE XII.—B. W., aged twenty-eight, dry-goods packer. Circumcised for obstinate phimosis ; urine passed as a delicate spiral thread. After three quarters of an hour trial under cocaine got a filiform into bladder ; partially divulsed anterior urethra over this with a slender Thompson, and then passed the staff of Maisonneuve with some force and much difficulty into the bladder. Was obliged to stop here, and have chloroform administered.

The operations, as before detailed, including meatotomy, were now done ; boric acid and quinine were both given ; care as to washing and diet closely observed ; the case conducted to the end without any fever or noticeable feature, and discharged, passing a full stream. Eighteen months later reported by brother-in-law as likely to have to come back ; no particulars.

CASE XIII.—Delicate man of thirty-five, a journalist. Found one morning that my assistant had, after long effort in the night previous, passed a filiform for extreme retention, leaving it in, and ordering rapid boric-acid saturation. On my arrival next morning, half a water-bucketful of urine was shown as having trickled out around the whalebone. Operated at once, as in other cases ; had series of furious chills ; urine showed no albumin ; result excellent, but general health bad. Treated for some time afterward for pulmonary tuberculosis, as he had all the usual symptoms, including cough. Patient went home to northern Ohio, and died nearly two years later. Autopsy showed both lungs sound, but kidneys almost wholly de-

stroyed by disease. This latter report made to me by a lay kinsman of the patient.

CASE XIV.—W. S., aged thirty-five ; country school-teacher. This is a case that would alone require a half-dozen pages to fully report. A purple, engorged glans penis ; a cartilaginous meatus ; a sallow, broken subject, passing as high as eight pints four ounces of urine, of specific gravity 1·005 to 1·000, free of albumin, in twenty-four hours, devoting almost his entire time to the discharge of this fluid, that escaped most tediously through a urethra closely strictured almost its entire length. Every operation in the category of internal urethral manipulation was done, not at once, but from time to time, over a period of three months, beginning in January, 1889. No fever of any amount ; two weeks one time and one another in bed, and a full recovery, with disappearance of the polyuria among the results. Fourteen months later, 29 F. curved passed easily into bladder, the man being now wholly well.

I will not detain you with a further recital in detail. Twenty-two such cases in all comprise my list without a single death, with hardly a failure, and without in any case an external urethrotomy. A *Maisonneuve* grooved *on the top*, yet no serious hæmorrhage in any case, several of the cases of the most urgent type, many of the worst not going to bed for more than two days, and some—as in H. R., a medical student, candidate for the degree—not laying up at all ; and urine fever, for escape from which the perineal section is demanded, playing practically no part in the history of the entire group of cases. During the time that these cases have been accumulating I have done perineal section without a guide for impermeable stricture four times, with three successes and one death from pelvic phlegmon.

Society Transactions.

AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

FOURTH ANNUAL MEETING, ALTOONA, PA., JUNE 3 AND 4, 1890.

FIRST DAY.—*Tuesday, June 3d.—Morning Session.*

THE President, DR. JOHN P. BRYSON, of St. Louis, read a paper on **Tuberculosis Uro-genitalis, a Clinical Study.**

The paper had reference chiefly to the questions of diagnosis and the advisability of surgical treatment. The opinions expressed were the results of a clinical study of eighty-four cases of the disease and of twenty-three operations done on fourteen patients. The cases covered the entire field of genito-urinary tuberculosis, both in reference to the tissues and organs affected and the degrees of intensity shown by the pathological process. The operative work might also be said to cover the entire field, there being seven operations

done on the testes (five removals and two extensive curettings), fifteen on the prostatic-vesical structures, and one on the kidney (nephrotomy).

Even in the matter of diagnosis we obtain great assistance from recent advances in the domain of pathology. We no longer believe in an idiopathic inflammation. The search is constantly for the ætiological factor. Scientific progress is very distinctly in the line of the ætiological instead of the clinical classification of disease. All of this is in the direction of simplicity and clearness, a statement which is not contradicted by the fact that we now realize that the same ætiological factor produces a certain variety in its clinical manifestations in different individuals, in the different tissues of the same individual, and in the same tissues at different times. This is clearly seen in the case of tuberculosis, for we now classify as tubercular all inflammations which have for their ætiological factor the well-known bacillus of Koch.

Studied in the light of our present knowledge of the pathology and pathogenesis of tubercular disease, his clinical and operative work seemed to justify the following conclusions:

1. That the pathogenic factor reaches the parts involved by way of the hæmatic channels.
2. That more than one part of the uro-genital system is affected very early in the history of the disease—perhaps simultaneously.
3. That the prostatic-vesical and the periprostatic regions show by far the greatest liability to early involvement.
4. That all the evidence points to the conclusion that we have to deal, even in its earliest recognizable stages, with a general disease which manifests itself by localizations.
5. That present experience does not warrant the belief that operations, however extensive, undertaken with the view of excising localized lesions, and thereby radically curing the disease, will be successful.
6. That our chief resource is still in general antitubercular treatment, reserving surgical interference for the palliation and relief of pain, bleeding, and wasting suppuration.

Discussion.

DR. E. L. KEYES believed tuberculosis to be a general malady with a multiplicity of local expressions. A person might be tubercularly inoculated, but the local inoculation would not yield general infection unless the person was already by inheritance endowed with the tubercular soil, and that, had he not gotten this local infection, he would be liable to have general tuberculosis by reason of his tubercular tendencies, the seed of tuberculosis being widespread and capable of inoculating itself under appropriate circumstances. Infection doubtless took place through the hæmatic channels. The infection of a local area by the tubercle bacillus floating in the hæmatic channels, in his opinion, customarily took place only where the soil had been prepared by traumatism or by some grade or quality of inflammation. Tubercular manifestations about the prostatic region and urethra were not at all uncommon after gonorrhœa; about the pulmonary tract they often followed repeated exposures to cold and various deteriorations of the system. There seemed to him to be three elements involved—1, the specific bacillus; 2, local inflamma-

tory focus; 3, the soil. There was every reason to suppose that the bacilli did descend with the physiological current from the bladder, and finding the proper soil near the neck of the bladder, for instance, there inoculated themselves. Whether the bacilli could mount against the current was not determined. The ordinary infective bacilli which produced cystitis and so-called catheter fever certainly mounted against the current. Guyon had shown that in the fibrotic condition of the bladder, prostate, ureters, and pelvis of the kidney, the condition of hardening is apt to take place first in the prostate, the condition of dilatation first in the bladder, next in the ureter, next in the pelvis of the kidney, and last in the orifice between the ureter and the bladder. At that point there was a certain amount of natural obstacle, but in conditions of dilatation of these channels a small amount of infective material might get through. In the tubercular condition, on the other hand, there was no antecedent dilatation, and the traveling upward of bacilli would hardly be an analogous journey. Réclus maintained that tuberculosis never primarily attacked the testicle, but was always found in the prostatic region and in the seminal vesicles earlier than in the testicle. In support of the belief that tubercular disease of the prostatic region, bladder, or testicle does at times recover, Dr. Keyes cited a case to which Dr. Van Buren used to refer as establishing the analogy between genito-urinary tuberculosis and pulmonary tuberculosis. In the case in question the epididymis and tunica vaginalis were involved and there was the passage of blood at the end of the urinary act, showing ulcerative tubercular disease at the neck of the bladder. The hæmorrhage was regarded as the analogue of hæmoptysis. The case recovered after a voyage around the world. Under proper hygienic and medicinal treatment he had seen a number of patients recover from tubercular disease of the bladder, prostate, seminal vesicles, cord, and testis. He was not sure that he had ever seen a case of tuberculosis of the kidney recover. As to local treatment, he believed in the liberation of any tension about a focus of tubercular disease where it could be done in any reasonable way. Perineal section was often advisable in well-pronounced tubercular disease of the deep urethra and prostatic sinus. Some cases, he felt confident, might be cured in that way or by thoroughly scraping with a sharp curette. He was also confident that many cases could not be cured in this way. Allusion was made to a case of tuberculous disease of the prostatic sinus in which there had been a spontaneous perineal abscess and two fistulae. He did perineal section; scraped thoroughly. Shortly after the wound healed a tubercular focus in a very localized form appeared in one testicle, there being no epididymitis and no symptom of trouble about the deep urethra. This went on to abscess formation, which at a subsequent operation was removed, scraped, treated with iodoform, etc. The recovery was perfect. This case showed the value of local interference. As to extirpation of the testicle, he believed, with Verneuil, that this sometimes hastened the development of the same disease on the other side. Recently he had seen two patients, in both of whom a testicle had been removed when it became enlarged and tubercular, and before there were any sinuses or any bladder symptoms; in both the disease recurred in a very acute form in the other testicle. Both wished to have the other testicle removed, which he declined

to do. He believed that good results might be obtained from the removal with the curette of foci of disease; and this would incur no danger to the other testicle. The effect of genito-urinary tuberculosis upon the organism and upon longevity varied, as it did in pulmonary tuberculosis. Remarkable improvement often took place in apparently desperate cases. The method of scraping and the application of iodoform oil in suprapubic infection, as advocated by Guyon and others, had a certain promise in it. In closing, attention was called to the possibility of cure or of great improvement from change of habitat, the use of tonics, out-of-door life, etc. The disease had been observed to break out afresh in patients who had returned to New York, thinking themselves cured. For over a year he had been using iodoform internally, as suggested by Verneuil, not in the hope of curing the disease, but of inhibiting the development of tubercle. He thought there was value in it, but he was not prepared to say how much.

DR. L. B. BANGS, of New York, in the discussion read a paper entitled **A Case of Obscure Bladder Disease treated by Suprapubic Cystotomy and Prolonged Drainage.***

Discussion.

DR. A. T. CABOT said that the frequency with which the prostate or prostatic-vesical region was affected had seemed to him not to point so much to the fact that the disease frequently started there as to the fact that the prostate was, so to speak, at the cross-road between the genital and urinary systems; that, in case of either a tuberculous kidney or testicle, the escaping bacilli would pass along the prostatic region. He had seen cases of apparently primary tuberculosis in the testicle in which there had been epididymitis or orchitis following urethritis probably gonorrhœal in its nature. In these cases the testicle or epididymis had been affected and had not cleared up, but a hard nodule had persisted for five to eight years without any apparent indication of implication of the neck of the bladder. It was hardly to be presumed that the prostate was affected during all that time without symptoms. He agreed with Dr. Keyes that it was not advisable to remove a testicle which had a slight hardness in it. In cases where the extent of the lesion in the testicle was a drain on the system he had done palliative operations as advised by Dr. Bryson. The effect of moisture on tuberculous lesions, as Dr. Bryson had shown, was interesting. In peritoneal tuberculosis removal of the fluid was known to limit the advance of the disease. It seemed reasonable that, in those cases where there was a lesion in the bladder, good might result from the removal of the local lesion. Nature could take care of the deeper lesions by encapsulation, but ulcerative lesions on the surface did not tend to get well, and the treatment of these lesions by scraping had given good results in cases where they were causing uncomfortable symptoms.

With reference to the effect of ablation of one testicle as increasing the tendency to disease in the other, the following case was cited: A tuberculous testicle was removed in a child three years of age. There was no apparent extension up the cord, and yet within six weeks the other testicle was markedly involved, although previously no signs could be made out.

* See page 243.

The favorable influence upon the disease of change of habitat had been marked in his practice. The cases in which good results had been obtained had almost invariably been in consequence of resort to that treatment.

DR. F. S. WATSON said, so far as his experience went, that in these cases drainage by the perinæum had not only failed to relieve, but the presence of the tube had, he thought, aggravated the symptoms. If one was to use drainage at all, the procedure Dr. Bangs resorted to was, in his opinion, the wiser one, and much more likely to give benefit. In regard to local interference when the disease was in the bladder it seemed best to follow the advice of Guyon—that was, employ the suprapubic incision, extensive curetting, and burning with the Paquelin cautery. The question of the presence of spasm of the compressor urethræ muscle in connection with these cases seemed to him of interest. While it often existed in cases of chronic prostatitis, masturbation, or gonorrhœa, and affected urination and the introduction of instruments, Dr. Bryson had not met with this condition in the whole series of cases of tuberculosis, although the prostatic region was affected, a thing well worth considering in diagnosis. Dr. Watson expressed an unfavorable opinion concerning bladder washes in these cases. So far as he had seen, they had worked harm rather than good; and a steady increase in the severity of the symptoms while using local applications had in some cases led him to suspect the tuberculous nature of the trouble. Periods of great improvement constituted a characteristic sign of the disease. He believed that cases did originate in the testis and epididymis, having seen a number of cases in which the sequence of events was as Dr. Cabot had described.

DR. J. WILLIAM WHITE said that, taking a broad clinical view of tuberculosis, there was at one extreme the rapidly fatal form of miliary tuberculosis, and at the other the slow form called scrofula, but which might with propriety be called chronic tuberculosis. It seemed to him that the majority of the uro-genital manifestations of tubercle belonged to the scrofulous variety. Gland enlargements and suppurations were frequent in this form of tuberculosis, and it appeared to him quite probable that the frequency with which the prostate gland was the seat of tubercular disease was due to its relations to the glandular system, although, as we were aware, it was chiefly a muscular organ. The cases allied to the scrofulous form of tuberculosis were those in which we might expect the greatest benefit from operative interference. He thought the condemnation of operative measures had been a little too sweeping and not sufficient regard had been had to classification. He said that the results obtained from extensive enucleation of enlarged scrofulous glands were very good; and that some of these cases which had resisted hygienic and medicinal treatment yielded to the knife without being followed by any return of tubercle, the same being true in operations upon tuberculous bones and joints. Certainly there had been no widespread testimony to the effect that operation encouraged a rapid return of the general disease in these two classes of cases; therefore, while in the main his experience corresponded with that of the other gentlemen, he was not prepared to go quite the same length in condemning the operation. He

failed to see why on *a priori* grounds a partial operation should be any better as regards return of the disease than a more complete operation. Excluding hopeless cases and bearing in mind the general subdivision of chronic and acute tuberculosis, we might, perhaps with propriety, interfere oftener than the remarks of Dr. Bryson and others would indicate. Dr. White also spoke of the dissemination of tubercle by the lymphatic system, and said that, inasmuch as the lymphatic channel was often in opposite direction to the physiological channel of the excretion, this might explain why the bacilli seemed to mount against the current.

DR. J. NEVINS HYDE related the case of a patient apparently otherwise in good health with a distinct nodule in one testicle, the cord not being involved. No other sign of trouble was discoverable, and there was no history of previous venereal trouble. During Dr. Hyde's absence from the city the testicle had been removed. This patient returned a few weeks later, having lost forty pounds, his lungs disseminated with tubercles, and evidently on the road to the grave.

DR. L. B. BANGS said he had come to a very considerable degree of conservatism with regard to operative interference in these cases, for it did seem as if in certain individuals presumably in good health, with the exception of a local deposit, a slight operative interference precipitated upon them a violent outbreak of the general disease. In cases of primary infection of the testicle alone which had been operated upon, he had seen the disease appear very speedily in the other testicle. He cited such a case in which the left testicle had been extirpated and an outbreak speedily followed in the right testicle and lungs. The patient was then treated by hygienic means and was now living with a large nodular right testicle and some evidence of thickening of the summits of both lungs. In spite of these conditions, the man was in good apparent health. Dr. Bangs had come to the conclusion that, unless the lesion of the testicle or other organ within reach of surgical interference was such as to drain the man's vital powers either from suppuration or from intense pain or from some effect upon his morale generally, it was better to refrain from operative measures.

DR. R. W. TAYLOR thought one should, in deciding the question of operation in case of a tuberculous testicle, take into consideration the stage at which the lesion was discovered, the condition of the patient, and the probable localization of the disease. A tuberculous testicle was apt to swell, to cause pain which extended up the cord, to be attended with abundant suppuration, and, unless the man was of very cleanly habits and had every facility for washing himself, he became a nuisance from the stench he carried with him; so he thought it was well to take the middle ground between the two extremes—of early excision and of temporizing.

DR. E. L. KEYES said he had several times seen cases in which tubercular disease appeared primarily in one testicle, but never had demonstrated its origin there to his satisfaction, because such patients were young men of tubercular inheritance, who got into a condition of spontaneous tubercular disease of the testicle without antecedent gonorrhoeal implication. Such patients had many times denied having symptoms of vesical irritability, but the urine had invariably been found to contain shreds which indicated vesi-

cal irritability. He had failed to find anything in the prostate by the touch. Dr. Keyes referred to an observation made in the Hôpital des enfants malades by a French physician, that primary tubercular disease of the testicle was of frequent occurrence in young infants, and that it habitually went on to resolution, often with atrophy of the testicle. Dr. Keyes had never himself met with such cases.

DR. L. B. BANGS had seen this condition, but never unassociated with other tuberculous manifestations—as, for instance, in the joints. He had seen such children get well without treatment.

DR. R. W. TAYLOR had many times seen children with hereditary syphilis with scarcely any noticeable lesions, who had swellings of the testicle and epididymis which lasted a certain length of time and were followed by atrophy, which was always complete as regarded the integrity of the organ. He suggested the possibility that the cases alluded to by Dr. Keyes were of this nature.

DR. J. P. BRYSON, in closing, said that we now recognized an ætiological classification of tuberculosis and of the various manifestations which the same factor would bring about in different individuals, and that this recognition had been of assistance in the matter of diagnosis. He held that anything which had a favorable effect upon the system generally would have an effect upon the tuberculous disease, in that it influenced the soil; and that there was nothing which produced a more salutary influence than change of climate. He cited a case in which a double tubercular epididymitis in a young man who, according to the history given by the mother and the doctor, was born with tubercular epididymitis, had resolved perfectly during a three-years' sojourn in southern California. He agreed with Dr. Watson that in tubercular disease the use of injections of nitrate of silver, especially in the deep urethra, might be distinctly injurious. Several years ago he had called attention to the fact that spasm of the compressor urethræ muscle was not observed in cases of tuberculosis of the deep urethra, and subsequent experience had confirmed this observation. In regard to the relative frequency of the involvement of the veins and lymphatics, his operative work had led him to believe that it was the veins which were affected and not the lymphatics. As regarded any difference in advantage between the methods of drainage, his observations had led him to prefer the suprapubic incision rather than the perineal. We had very little ground on which to form a definite judgment as to the influence of operative work on the exacerbations of the disease, because without operative interference as well as with it we saw most marked changes taking place in the shortest periods of time in the same individuals. He had seen cases in which syphilis and tuberculosis existed in the testicle at the same time. On the institution of antisyphilitic treatment in one case, the dose of iodide of potassium being carried to three hundred grains per day, the syphilitic manifestations disappeared, leaving very clear tubercular nodules in the testis. The nature of these nodules was confirmed by microscopic examination. He regarded it as questionable whether the so-called cheesy inflammation which was known to follow syphilis was not just as much a tubercular inflammation as if it were not connected with the syphilitic process.

DR. TAYLOR said that syphilis did produce a fibroid testis, and that he had seen a fibroid testis undergo a subsequent tuberculous change, the points of degeneration being the cheesy masses alluded to by Dr. Bryson.

DR. E. R. PALMER, of Louisville, Ky., read a paper on **Circumcision**. The reader believed that in the majority of cases male babies should be circumcised, but deprecated any sacrifice of tissue, slitting the dorsum well back on a grooved director with a pair of scissors being sufficient. No stitching was called for. In adults he believed the operation indicated—

1. In all men, otherwise healthy, who possessed a long, non-adherent prepuce that was so narrow at the orifice or glove-fitting in its nature as to prevent easy retraction in a state of complete erection.

2. In cases of redundant prepuce where only extreme cleanliness and care could prevent frequently recurring excoriations or balanites, and finally where, although the prepuce was freely movable, full erection failed to uncover the glans.

In disease the writer considered the operation indicated in the following conditions : 1. In gleet with stricture, where a long and tight prepuce interfered with the operation of urethrotomy. 2. In cases of recurring herpes and balanites. 3. In syphilis, where the chancre might be removed with the redundant tissue. 4. In some cases of chancroid complicated with phimosis, where the local disease was beyond the reach of our remedies. The author advised carefully preserving the frænum, using interrupted suture and the application of a dry antiseptic dressing.

Discussion.

DR. E. L. KEYES stated that he was not in the habit of using any dressing whatsoever; that he used the horse-hair interrupted suture, and that the stitches cut their way out and did not require to be removed. The patients went about on the third day.

DR. J. N. HYDE had observed the very remarkable narrowing of the meatus in Jewish patients, which was possibly the result of evolution, but to his mind the typical glans penis of the Jew had a large base with a distinct cone, and where there had been no interference an exceedingly small and narrow meatus externus. It seemed as though there had been on the part of nature an effort to produce a certain degree of stenosis.

DR. W. K. OTIS said that the question of hereditary transmission was not to be considered in connection with circumcision. Acquired characters could not be transmitted unless the acquired character was of such a nature that the nervous system was so disturbed as to produce a change in the germ plasm; consequently the fact that many thousand foreskins had been cut would not warrant us in expecting the male offspring of those circumcised to be born without the long foreskin.

DR. J. WILLIAM WHITE said that his usual way of operating was to introduce a grooved director underneath the foreskin, then passing a bistoury to slit up the dorsum of the penis, preserving the frænum. Usually he applied no dressing. He sometimes dusted on iodoform. He had sometimes used a catgut suture, but in children the removal of the stitches caused as much suffering as the original operation. He alluded to the reported bad

results from the use of cocaine. It had been said that it produced considerable sloughing. He had had no bad results.

DR. TAYLOR agreed with Dr. Palmer that, if the same operation was used on children as on adults, after three or four years the child would have as long a foreskin as before.

He had very strong convictions as to the treatment of chancroidal phimosis. If seen early, rest in the recumbent position, injections of bichloride or carbolic acid, and hot-water affusions might be effectual. He had many times made lateral incisions through the foreskin in bad cases by taking a pair of scissors and going well back until he struck the fossa at the base of the glans on one side and then on the other; then he had the whole matter under control. Whereas, after the dorsal incision, œdema always occurred, particularly in the soft tissues around the frænum, and on the next day, unless one took the greatest care, he was apt to find the glans well down in the collar which runs obliquely around the penis, and one could not get at the pockets on each side of the penis, where the chancroids were so prone to burrow and so prone to eat into the urethra. After making his lateral cuts, he soaked the parts well in warm water, got off all the *débris*, did not cauterize, washed with five-per-cent. carbolic acid, dried as well as possible, dusted in iodoform, and tucked thin layers of absorbent cotton all around the glans; then brought the parts together with a bandage, so as to exert pressure. After this operation the upper half of the prepuce withered up into a little three-cornered-shaped flap. This could be cut off after healing had well advanced, and the corners of the lower flap could be evened off by a semicircular incision. He said that by that procedure he had saved the integrity of many organs where the ordinary circumcision would have produced greater or less destruction.

DR. J. B. WHITE said that formerly he declined to operate on chancroids for fear of inoculating the wound. He had adopted the method of lateral incision, and he did not hesitate a moment to do this operation when the integrity of the foreskin and the organ seemed threatened. His method differed in one respect, as he used a solution of chloride of zinc (thirty to forty grains to the ounce), which, applied to the freshly cut surfaces, caused coagulation of albumin and avoided sepsis during the first few days when granulations were forming.

DR. BRYSON said that, in circumcising children, he had several times seen considerable irritation result from the dorsal incision, and he had for that reason been inclined to remove the foreskin and to stitch the parts together very accurately. He thought by so doing he had less œdema and quicker and more accurate healing.

DR. E. R. PALMER, in closing the discussion, said he thought the objection to catgut was that it would leave scars. With reference to cocaine poisoning, he had had some cases. His method did not take the patient from his work at all. In the last few operations he had used boric acid instead of iodoform, which sometimes caused urticaria in the surgeon and was disagreeable from the odor.

He said that he had had one case of cocaine poisoning after the injection of about ten drops of a four-per-cent. solution where he was to do meatoto-

my. Another case of cocaine poisoning occurred after the use of half a drachm of the four-per-cent. solution injected into the scrotum before operating for varicocele. He had never had any poisoning when the rubber band was used.

Afternoon Session.

A Case of Stricture followed by Rupture of the Urethra and Extravasation of Urine; External Urethrotomy; Recovery.*—By DR. J. BLAKE WHITE, of New York.

Report of Six Cases of Perineal Section.—By DR. J. WILLIAM WHITE, Philadelphia.—The cases detailed were all cases of perineal section and did not include any cases of simple external perineal urethrotomy. The operations were all performed during either acute retention of urine or during a marked exacerbation of chronic obstruction which resulted, in two of the cases, from recent complete rupture of the urethra; in one, from old neglected stricture and recent false passage; in two, from traumatic stricture following old and presumably incomplete rupture; in one, from stricture and false passage. The steps of procedure were obvious and beyond dispute except as to a few points:

1. In all cases in which perineal section was performed for stricture impassable, but without other complications, the method of Mr. Wheelhouse, of Leeds, seemed to him to meet every indication.

2. If persevering search failed to reveal the proximal end of the torn urethra, was suprapubic cystotomy and retrograde catheterization justifiable? He was inclined to answer this affirmatively, though such failure should be most exceptional.

3. Much difference of opinion existed as to the value of a retained catheter after perineal operations opening the urinary tract. Many authorities advised that in cases of section for stricture no instrument be employed, or that, at the most, a short perineal drainage-tube be used. Others directed that a catheter be kept through the urethra for forty-eight hours and then withdrawn. He believed, however, basing his opinion on a fairly extensive trial of both methods, that the retained catheter was of great value in all operations connecting the bladder with the surface of the body, not excepting certain cases of lithotomy with purulent cystitis. If not allowed to project too far into the bladder, and if kept clean, it was of the utmost advantage in aiding in the prevention of urethral fever. Of equal importance, in his opinion, was regular catheterization at short intervals after the removal of the catheter first introduced.

4. After the introduction of the catheter in cases of rupture, was there definite advantage to be derived from urethral sutures? The surgeon had four plans open to him—(a) to leave the wound open without any attempt at coaptation, (b) to suture the urethra only, (c) to suture only the outer parts, (d) to separately suture both the urethra and the parts superficial to it. His own experience seemed to justify the employment of sutures of the urethra. By the introduction of a large catheter and a careful coaptation of the torn ends were met all the indications, which were: 1. To open a large passage for the

* Will be published in a subsequent number of this Journal.

accumulated fluids in the tissues. 2. To keep up a free flow of urine. 3. To encourage rapid union of the two ends of the urethra and the walls of the cavity formed by the extravasation into the perinaeum. 4. To prevent the formation of a cicatricial stricture of the urethra. His own results by these methods had thus far been so extremely satisfactory that he should certainly continue their employment. He thought the sterilization of the urine by boric acid or by salol to be of great importance in the after-treatment of all these cases, and never to be omitted. These remedies were more effective, in his judgment, if combined with full doses of quinine.

Cases of Successful Operation for Bulbo-membranous Close Strictures by Internal Urethrotomy.*—By DR. E. R. PALMER, of Louisville, Ky.

Discussion.

DR. F. S. WATSON said that he had always been on the side of Harrison and others who preferred perineal drainage as a safeguard in cases of deep, tight stricture. The cases in which he had seen rapid dilatation or divulsion had been followed by very much larger proportion and much greater severity of urethral fever and its concomitants than those cases in which there had been free incision and drainage posteriorly. With reference to the question of leaving the catheter in and drainage after the external operation, he preferred a shorter duration of drainage, except in cases where one was going to suture the urethra.

DR. L. B. BANGS said, with reference to the retention of the catheter, he had never used it through the whole length of the urethra as Dr. J. W. White did. It seemed to him that the retention of the catheter in the anterior part of the urethra excited traumatic urethritis and had a bad effect upon the nervous system and kidneys. In the traumatic cases to which Dr. J. W. White had referred, in which there was the escape of a few drops of blood from the meatus and slight tumefaction of the perinaeum, he would make a perineal incision, for in cases in which this was not done he had found the urethra later in life in a state of contraction of cicatricial tissue, necessitating operation. In the class of cases described by Dr. Palmer he preferred the external operation, draining not only the bladder, but the damaged perineal and urethral tissues.

DR. W. T. BELFIELD thought Dr. J. W. White's paper an admirable illustration of the application of aseptic principles to a part of surgery which had very largely gone without such application. The plan he had followed commended itself, he thought, to all for the relief of those conditions. He would disagree with him, however, in the matter of resorting to suprapubic cystotomy for catheterism in case of failure after reasonable effort to find the inner end of the ruptured urethra. He fancied it would be as well in such condition to make a urethra by incision at the point where the urethra ought to be, which was easily done with the finger in the rectum. When the bladder end could not be found it was probably so nearly obliterated by the growth of cicatricial tissue that it was not of prime importance to seek it and endeavor to restore it. Dr. Belfield referred to a case in which

* See page 252.

a drainage-tube had been intentionally kept in the perinaeum for sixty-seven days, and where the wound healed promptly on curetting the entire tract, making an incision on the anterior and posterior edge of the wound and passing stitches down to the urethra.

DR. E. L. KEYES expressed his preference for drainage by a tube through the perinaeum, and if he used sutures at all he preferred to suture the deeper parts. He did not think there was any particular advantage in suturing. He frequently got his cases of external urethrotomy out at the end of a week, in the majority of instances at the end of two weeks. He was on record in regard to the value of perineal section promptly in case of moderate damage to the urethra, because, when otherwise treated, this so frequently led to dense and tough stricture later. In Dr. Keyes's opinion, deep internal urethrotomy was not good surgery. He had seen and had had patients die under this operation, and had in other cases turned out two or three handfuls of clots from the bladders of patients thus operated upon. A deep stricture to be cut thoroughly ought to be cut very widely, and if cut very widely, the possibility of hæmorrhage was present and the probabilities of urinary fever were considerably greater. The perineal drainage, in his opinion, did materially diminish the risk.

DR. W. F. GLENN agreed with Dr. Palmer as to the value of internal urethrotomy. While there were dangers attending cutting in the deeper urethra, yet he thought the operation could be performed as successfully as external urethrotomy. Dr. Glenn had found electricity of service in close stricture. After its use a larger instrument could be passed and he could then proceed to divulsion, rapid dilatation, or cutting, as he saw fit. He had seen some of his cases several years after, and the caliber of the stricture had not diminished.

DR. F. TILDEN BROWN said his experience was in accord with those who advocated perineal section with deep urethrotomy. With reference to electricity in the treatment of the urethra, when he had seen advantage it was in the deeper portions of the canal, and he had good reason to think the advantage was owing to the stricture not being organic. One oftentimes found, after cutting the anterior urethra, that a full-sized sound would pass readily into the bladder through what had before seemed to be a tight stricture, thus showing the narrowing in the deep urethra to be purely spasmodic.

DR. A. T. CABOT said in regard to the operation of perineal section for the extravasation of urine, or for an abscess in the perinaeum, that one always started with the intention of finding the bladder end of the urethra and of draining the bladder by the introduction of a tube or a catheter through the urethra. He did not, however, think that the introduction of a tube into the bladder was so important a part of the operation as many supposed. He had once operated on a patient in whose perinaeum, after opening an abscess, he had cut through at least one and a half to two inches of tough fibrous tissue before reaching the neighborhood of the urethra. Careful dissection failed to disclose the distal end of the urethra. Pressure over the pubes did not produce any jet of urine. He then dissected back toward the apex of the prostate with the finger in the rectum, and still failed to find the urethra. As the man was not dying from retention of urine but was suffering rather

from the inflammatory condition about the perinæum, which had been relieved by the operation, and as the patient was in rather an alarming state of weakness, he decided to leave things as they were, feeling that the bladder would have sufficient drainage through the wound. The man was entirely relieved by the operation. A fortnight later the dense indurated mass had entirely disappeared, and then pressure over the pubes gave a jet of urine and showed the way into the bladder. He considered that in this way he had given the patient a better chance than by the unerring thrust of Mr. Cock, or by suprapubic incision and retrograde catheterization. He had followed the same plan in several later cases with equally good success, when the strength of the patients did not warrant a long search for the bladder end of the urethra. He regarded the formation of an artificial route into the bladder as an unsurgical proceeding.

DR. BRYSON thought the whole question of perineal incision turned upon the effort to make a radical and permanent cure of stricture of the urethra. Since he had reached definite views in regard to the causation of stricture and the relations of the condition of the mucous membrane to the formation and continued development of the stricture, he had not had any doubt about what the direction of treatment should be, and that was distinctly toward the restoration of the mucous membrane in its perfection, so that we no longer had what he took to be, and Mr. Harrison stated to be, the essential aetiological factor—namely, “urine leakage.” Since he had resorted to the administration of boric acid, which had never disagreed with his patients, and the careful washing of the wound with proper drainage, he had had no cases of chill followed by fever in any urethral operation, especially where the perinæum was opened. He preferred external perineal section for deep stricture, and always attempted to remove stricture tissue and to bring the cut ends of the urethra together. Thus far his success had been all that could be expected. He thought we should make a very clear distinction between inflammatory and cicatricial strictures of the penile urethra. Many cases of stricture here could be cured by cutting, some more by cutting and topical applications. In his experience, he should say there was less danger with the external perineal incision than in the internal urethrotomy with or without a guide. As to electricity facilitating the entrance into a narrow stricture, he could conceive that that could only take place by the electrical current softening the urethral walls. When working with a filiform instrument, that was just what he did not want to have happen. The whole credit was often given to electrolysis for results which he thought were due to patient dilatation.

DR. J. B. WHITE thought that after the external incision the closure or non-closure of the perineal opening and the establishment of urinary fistula depended much upon the condition of the anterior urethra. He cited a case in which after external urethrotomy the perineal wound did not heal, and, on examination, a stricture of large caliber was found in the anterior urethra. This was operated upon and the wound entirely healed.

DR. J. W. WHITE observed that the point he made in his paper as to the confusion of terms had been illustrated in the discussion. The term perineal section had been used with the meaning of external perineal urethrotomy on the staff, external perineal urethrotomy in rupture of the urethra, and exter-

nal perineal urethrotomy in stricture of the urethra. The term should be restricted to those cases where we sought to make an opening between the surface and the urinary tract, where no instrument could be passed. It was a synonym of external perineal urethrotomy without a guide. He was surprised to hear Dr. Bangs say he thought the disturbances from retained catheter were due to the irritation of the anterior urethra. He believed the chief disturbances from retained catheter were due to the prostate and neck of the bladder, and that the advantage in using it consisted in the more perfect drainage of the bladder. No allusion had been made to the use of the catheter at short intervals after the permanent catheter had been withdrawn. His object in using that was simply to divert the urine from the perineal wound and insure its entire closure.

DR. BRYSON said he had never seen, even after prolonged drainage, a fistulous tract refuse to heal in a short time after the withdrawal of the drainage-tube, provided there was not some other condition which would have kept it open independent of the drainage-tube; and that he preferred to introduce the catheter throughout the whole length of the urethra where he had brought the cut ends of the urethra together rather than bring it out of the perineal wound in order to prevent urine leakage, which would interfere with the rapid and satisfactory healing of the fistula.

DR. KEYES said the objection to a drainage-tube through the entire urethra was that a small tube must be introduced. His method was to introduce as large a tube as possible through the perinæum.

DR. PALMER stated that one reason why he had operated in the manner described in his paper was that patients would not submit to the other method.

DR. J. B. WHITE, of New York, presented a **Urethrotome for Close Stricture of the Urethra**.*

Presentation of New Urethral Instruments. †—By DR. F. TILDEN BROWN, of New York.

Presentation of New Urethral Instruments. ‡—By DR. W. K. OTIS, of New York.

A paper was read by DR. HYDE, of Chicago, entitled **A Contribution to the Study of Pre-Columbian Syphilis in America**.

After giving a brief summary of the historical facts connected with the question, and of the etymological data which have been contributed by late students of Mexican literature, the author proceeded to give a description of a number of diseased bones of considerable antiquity, supposed to belong to the Pre-Columbian epoch, presumably affected with lues.

This group included tibiae from a mound in California, now in the Surgeon-General's office in Washington; a group of bones from Arkansas, now in the Peabody Museum of American Archaeology in Cambridge; and two bones from the collection of the author, exhumed from a prehistoric burial site on the Animas River, near Durango.

These were illustrated by photographs, as also were other bones exhibiting

* See page 250.

† Will be published in this Journal.

‡ Will be published in this Journal.

specific and non-specific changes. Photographs of these also were exhibited for the purpose of comparison.

The author also had sections carefully made of the bones selected from his own collection, drawings and photographs of these being also shown, with a report on the pathological conditions, prepared by Dr. T. Mitchell Prudden, of the College of Physicians and Surgeons, New York city.

After commenting upon the several conditions recognized, and also upon the facts accepted with reference to intrusive interment of many bones in mounds supposed to be prehistoric in America, the author concluded that, even admitting some of the bones under discussion to have been affected with syphilitic disease, it was not demonstrated of any one of them that it was not merely such, but also prehistoric, and wholly unaffected by the question raised by the frequent intrusive interment of bones in the mounds of America.

Some Unusual Modes of Infection with Syphilis.*—By DR. R. W. TAYLOR, of New York.

SECOND DAY.—*Wednesday, June 4th.—Morning Session.*

A Case of Successful Nephrectomy for Sarcoma was the title of the first paper, by DR. E. L. KEYES, of New York.

The tumor, at first thought to be cancerous, was proved by microscopic examination to be a sarcoma. The patient was alive and well at the end of a year. The disease was characterized during its existence by abundant hæmaturia. Along with the report of the case and an extensive bibliography, Dr. Keyes showed the diseased kidney, together with drawings giving its microscopic appearance.

A Case of Severe Hæmaturia; Nephrectomy by Dr. McBurney; Recovery.—By DR. F. TILDEN BROWN, of New York.

The patient was a woman, aged twenty-six, married, three children; previous health good; came of gouty family. Three attacks of hæmaturia—first in March, 1888; second in August, 1888; and third in October, 1889. First two attacks recovered from in a week, on the average. First attack diagnosed rupture of a renal vessel; second attack diagnosed by a different physician as renal calculus; third attack diagnosed by Dr. Brown as renal calculus, and nephrotomy was undertaken by Dr. McBurney for the removal of the calculus. Thorough exploration failed to reveal a calculus, and the importance of immediate nephrectomy to check fatal hæmorrhage was apparent and at once performed. The operation was followed by a critical condition, especially marked on the third day. Relief from hot-air and steam bath in bed. Six days later, miscarriage at about second month. Considerable loss of blood. Patient again prostrated, but slowly rallied, and made a complete recovery. Wound entirely healed by December 15th. Operation November 5th. The other kidney had been equal to all physiological requirements. Histological examination of the entire specimen by Dr. Delafield showed only chronic pyelitis, attributed by him to the former

* See page 201.

presence of a calculus some time since passed, probably in the earlier clots of the first attack, but leaving an inflamed condition of the pelvis sufficient, in his opinion and by clinical experience, to account for this severe hæmaturia. It was on this account that the case was reported—this heretofore unrecognized variety of kidney lesion capable of producing such severe hæmaturia. The author would suggest chronic pyelitis with acute hæmorrhagic exacerbations as an appropriate name for this disease.

DR. BELFIELD thought Dr. Brown's case unique. It occurred to him that if one could be sure that the hæmaturia did not originate in malignant trouble, it might be an experiment worth trying to ligate, at least temporarily, the ureter, and see what effect would be produced.

DR. A. T. CABOT said he noticed in Dr. Brown's case that in putting on the ligature, the ureter was included with the vessels. He cited a case in which he had adopted that plan, and, although the stump was sufficiently long, was transfixed and tied both with a Staffordshire knot and then *en masse* with a circular turn of very strong silk, yet on separating the kidney from the vessels there was a tremendous hæmorrhage from the artery, which was with difficulty controlled. The patient had lost a dangerous amount of blood, and, though transfusion was done, did not live twenty-four hours. Post-mortem examination showed no injury to any vessels except the renal vessels, which were cleanly divided, and the hæmorrhage was evidently due to the drawing of the stump out of the ligature.

DR. BRYSON said it seemed as if there must be some other factor present in Dr. Brown's case to keep up the hæmorrhage, because there was no evidence on examination of the recent presence of a calculus.

DR. BROWN in reply stated that Dr. Delafield saw every reason to believe that the existing pyelitis was capable of furnishing this dangerous hæmorrhage, although the initial cause of the pyelitis had probably some time before disappeared, perhaps during the first attack. The chronic condition in the kidney seemed each time to have its activities lighted up by some sudden strain on the part of the patient, or by her own energetic measures to escape pregnancy. He thought ligature of the ureter, as suggested by Dr. Belfield, might under appropriate circumstances do as a preliminary resort, but how far it would succeed in staving off a nephrectomy was a question. He fully appreciated the warning of Dr. Cabot, but in his case the condition of the patient was such that it rendered every moment of importance. The influence of the operation upon the remaining kidney and upon the vaso-motor system throughout the body was very marked. He thought operations upon animals testing the effect of ligation without removal of the different vessels of one kidney would be extremely interesting in this connection.

DR. BRYSON had been accustomed to attach great importance to the specific gravity of the urine as to the diagnosis and as to the favorable or unfavorable nature of the prognosis.

DR. BROWN stated that the specific gravity was suggestive of a decidedly gouty condition; but, on the other hand, there were no crystals of oxalate of lime or uric acid found, which seemed rather a contradictory condition. After the operation the specific gravity fell, was low throughout recovery, and since recovery had been rather lower than normal.

DR. A. T. CABOT, of Boston, reported **A Case of Cystitis with the Formation of a Thick Epidermal Sheet in the Bladder.**

The patient was a strong man of forty, who had been cut for stone by the lateral perineal incision in 1870. Always after this, urination was more frequent than normal. Five years ago he had an acute cystitis, and from that time the bladder was more troublesome. At the time that he was seen he was suffering from another acute attack of some weeks' duration.

Masses of epithelium were found by washing out the bladder with an evacuator, which were thought to come from a new growth, and a suprapubic cystotomy was accordingly done. The whole posterior wall of the bladder was covered with a thick sheet, which was peeled off and examined with the following result:

The membrane removed covered an area of about nine square inches, and when fresh was from one eighth to one sixteenth of an inch in thickness.

It was composed of epithelial cells, which were arranged much as they are on the surface of the skin. In the deeper parts they were penetrated by papillæ of connective tissue and the cells were square or rounded, while as the surface was approached the cells became flattened like ordinary epidermal cells, and upon the surface they were being exfoliated in ragged flakes. At no place was there any tendency of the epithelial elements to burrow down into the connective tissue after the manner of a cancer.

The condition was likened to those hyperplasiæ which are seen on other epithelial surfaces as the result of long-acting irritations, such as corns and calluses, and the suggestion was offered that perhaps the long-continued irritation of the cystitis would explain its formation.

Another interesting feature of the case was that there was a slight narrowing of the urethra at the site of the old lithotomy operation. The canal measured at this point about 26 French scale, as against 32 or 33 in the other parts of the passage.

Discussion.

DR. J. W. WHITE thought this case belonged in the class of cases which Guyon had described as membranous cystitis. Guyon had reported a number of cases in which even more extensive formation of membrane had occurred and in which the pathological condition was a marked proliferation of the epithelial elements, with agglutination by lymph and no neoplasm, properly speaking. The symptoms of this condition were sudden obstruction of urine, occasionally a little hæmaturia from the bladder relieved by operative measures in some cases, occasionally spontaneous relief. In the question of treatment, he thought, if one were quite sure of the diagnosis and of the extent of the disease, if it had reached the stage it had in Dr. Cabot's cases, the suprapubic method was undoubtedly the best method of procedure.

DR. A. POST called attention to the fact that in this case there was a narrowing of the deep urethra, due apparently to the old lateral operation for stone. This was interesting, in view of the assertion often made that no narrowing ever took place after that operation.

DR. FORDYCE showed two microphotographs which illustrated a similar condition of things seen by him at an autopsy in Vienna, in which the dis-

ease involved the urethra, bladder, and ureter. It was called at the time a sclerosis *en plaques* of the mucous membranes.

DR. BANGS cited a case in which there was the usual history of chronic cystitis, and finally the sudden extrusion from the urethra of a female of a complete membranous coating such as had been described by Guyon, which could be floated out in water and formed a complete mold of the internal surface of the bladder.

DR. WATSON stated that he had had this patient under his care before he went to Dr. Cabot, and that he was able from the urine to make a diagnosis of new growth, but no new growth he knew anything about. If one knew there was this condition present, it seemed to him the suprapubic operation was the only one one would care to try, because it was not like having an isolated tumor which could be reached through the perinæum, but the membrane had to be carefully peeled off.

DR. BRYSON said in those cases of exfoliative cystitis he had seen, especially in women, there was more fibrinous admixture, more like the diphtheritic membrane than this seemed to be. He wondered whether it would not be a good plan, even in as dense a membrane as this, occasionally to try to avoid operation by attacking the epidermal sheet with solutions of salicylic acid in the first place, and afterward with a solution of nitrate of silver, which he would use in stronger solution than Dr. Cabot had done. One might secure the breaking down of the membrane in that way and wash it out with a Bigelow aspirating apparatus. If this failed of result, he thought the operation done by Dr. Cabot exactly the right one. In regard to the use of nitrate of silver, he would not hesitate, even after a suprapubic operation, to use it in as strong a solution as twenty grains to the ounce, following it by the use of cocaine. In making the applications he used Keyes's modification of the Ultzmann syringe.

DR. A. T. CABOT presented specimens of the epidermal sheet in his case and showed microscopical sections of it. The sheet did not seem to him to resemble the fibrinous sheets which characterized the cases of Guyon. This was a thickened epidermal sheet, and not a fibrinous sheet, from the surface of the mucous membrane. The inflammatory element was very strong in Guyon's cases and not in this. The condition represented in Dr. Fordyce's microphotographs seemed to be a condition exactly similar to the one he had reported. The condition which Dr. Bangs described he had seen in puerperal women.

(To be continued.)

Pigmentation of Pregnancy.—In general, pigmentation shows itself in pregnant women only upon the face in the form of a *chloasma* mask, and upon the abdomen along the *linea alba*. Tarnier, however, has observed a woman at term, presented upon the chest, thighs, and abdomen disseminated spots of a diameter varying from a ten-cent piece to a quarter-dollar in size. The spots are brown and the intermediary skin paler than normal. The patient had experienced a similar *dyschromia* in a previous pregnancy, beginning as had this, and ending after delivery.—*Le concours médical*, April 5, 1890,

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Pathogeny of Erythemas.—In an important article which appeared in the *Annales de Derm. et de Syph.*, Dr. Besnier takes up again the question of the pathogeny of erythemata. He occupies himself particularly with the polymorphous erythemas and those which are termed scarlatiniform and desquamative, and of which I gave a description in this Journal in 1885. By clinical data of the utmost precision, he shows that the clinical manifestations the most identical with each other as regards external aspect, duration, and evolution, may result from causes apparently the most diverse. A desquamative scarlatiniform erythema, for instance, can occur in consequence of catching cold, of the ingestion of a drug, and in particular of mercury; or it may come without appreciable cause. It is, however, not possible to admit that we have to do with dermatoses of a different nature in these three orders of facts since the symptomatic expressions are perfectly identical. We are hence forced to acknowledge that, aside from the occasional cause, there is something else which presides over the pathogeny of these eruptions. This something else, according to Dr. Besnier, is an individual predisposition. It is in taking cognizance of this important element that we can understand how the ingestion of a single pill of the protiodide of mercury may determine the appearance of a scarlatiniform desquamative erythema which may last for several weeks, and which will persist for a long time after the drug ceased to exercise any injurious effect upon the organism. The mercury has evidently here only played the rôle of determining cause, calling into play the individual predisposition of the subject of this desquamative, scarlet-like erythema.

Evolution of Keratosis Pilaris.—I have just made a study of keratosis, in a long article which has appeared in the *Annales de Dermatologie et de Syphiligraphie* of January, February, and March, 1890. This affection, to which, in America especially, the name of keratosis pilaris is given, and which, although frequent in France, occurring in more than half the cases taken at hazard and examined, has been but little understood up to the present time. It has a clear evolution. Being unknown in the first two years of life, it appears toward the age of three or four years, occasionally later, about the age of puberty; it is then characterized, in its most accentuated form, by small papules which are red, conical, springing up about the hairs, and of the size of the head of a pin. It then tends to disappear, leaving behind small, white cicatrices of the same size as the papule which has preceded them, together with an atrophy of the hair bulb. These phenomena are most clearly upon the posterior parts of the arms of subjects of keratosis from twenty to forty-five years of age. Another symptom of this affection, which has been badly studied till now, is the erythematous redness which accompanies the papillary elevations in marked cases. This redness may be the first symptom of the disease. The red plaques of keratosis pilaris of the face have their principal seat upon the brows, the cheeks, in front of the ears, and

upon the forehead, and are always symmetrical. Most frequently they bristle with fine granulations about the hairs; occasionally they are scattered over with cicatricial atrophies consecutive to the evolution of the papillæ. In a greater degree of development there is produced upon the reddened plaques a true telangiectasis. There is, therefore, a variety of facial telangiectasis which is very frequent and in relation with keratosis pilaris, which must not be confounded with rosacea.

It is, however, the atrophic process and the alopecia of keratosis pilaris which seem to us to have been completely misunderstood. Cases have been described, it seems to me, without the pathogeny being understood. Taenzer has called such cases by the name *ulerythème ophryogène*. There are a number of alopecias about the brows which are due to this cause. Some subjects at the adult age have only a few scattered hairs upon the cheeks because they are affected with this disease. Finally, it is possible that there are many alopecias of the scalp of which the origin has hitherto been unknown, and which depend in reality upon this same dermatosis. Thus, at the last reunion of the French Society of Syphilography and Dermatology, Dr. Hallopeau showed a young infant whose scalp was scattered over with small red papillary elevations about the hairs. Here and there between them were seen white cicatricial plaques of alopecia, but slightly marked because of the tender age of the infant. From the center of the small papules the atrophic hairs found exit, scarcely ten millimetres in length and moniliform—that is to say, presenting successive enlargements and constrictions. The patient presented typical lesions of keratosis pilaris upon the limbs. Thus we have a case of monilethrix or nodose hair with cicatricial alopecia which is in direct relation with keratosis pilaris.

Treatment of Keloid.—In a recent article, Dr. Vidal takes up again the interesting and difficult subject of keloid. He has tried all the topical measures to no purpose, and knows of nothing efficacious excepting multiple quadrilateral scarifications. He recalls the fact that when he did the first operations he only had for an object the diminution of the pain, which at times accompanies cheloid, by cutting in deep scarifications, crossing each other the greatest number of nerve filaments, and, in fact, this process appeased the pains at once, and they ceased entirely after two or three sittings. Upon noticing that the keloids thus operated upon diminished in volume, Dr. Vidal conceived the idea of continuing treatment in the same manner to cause their total disappearance. As I have already said, in one of my preceding letters to this Journal, the incisions should be made at a distance from each other of two or three millimetres, crossed at right angles, or, better, crossed obliquely by other incisions in such a way as to divide up into squares or lozenges. They should penetrate the whole thickness of the keloid, and only go beyond the borders two or three millimetres. Local anaesthesia can first be secured, and the most appropriate for this purpose is, without doubt, the liquefied chloride of methyl, with which a brush is moistened and applied to the tumor until it has taken on a dull-white color by freezing of the tissues. The hæmorrhage after the incisions is insignificant, and is immediately arrested by applications of absorbent cotton. The day of the operation Dr. Vidal advises a dressing of cotton, soaked in boric-acid solution. The

following day there should be applied, directly to the scarified part, some Vigo plaster, which is to be changed morning and night.

It is most often necessary to make a considerable number of scarifications in order to obtain complete success. Dr. Vidal recommends expressly to continue the operation every eight days with the utmost regularity until there is complete disappearance of the tumor. If treatment is suspended and there remain any vestige of the growth, it soon begins to enlarge and is again reproduced. The length of time necessary to obtain a perfect result in carrying out this method has given Dr. Ledentu the idea of first removing the keloid surgically, of then bringing about union by first intention, and, in case of threatened recurrence in the linear cicatrix, of then performing scarification. I think I have already said in one of my previous letters that for keloid, as for many other chronic and rebellious affections of the skin, I am a partisan of the therapeutic method called mixed, which consists essentially in the successive employment of several processes having some well-known efficacy. It is frequent, if indeed not constant, that the later séances of scarification are not followed by the improvement noted after early operations. If we stop them for a time and carry out two or three séances of electrolysis and then begin the scarifications again, and so on, we obtain more rapid improvement.

Action of Aristol in Ulcerations of the Skin.—It is well known that they have been experimenting for some time in Germany with a substance called aristol, which is a combination of iodine and thymol. It is a reddish-yellow powder without the least odor.

I have received a certain quantity from Friedr. Bayer, of Elberfeld, who manufactures this product, and have tried it in my service. Aristol has seemed to me to possess valuable properties, especially when employed in the form of a powder dusted over ulcerating surfaces, and appears destined to replace iodoform with advantage in many cases.

I have obtained satisfactory results in a case of chancreoid as large as a silver ten-cent piece, with undermined edges and perpendicular border, its nature having been verified by experimental auto-inoculation. In four or five days the ulceration was completely modified in aspect and had lost its virulence. I regret very much that the rarity of chancreoids in Paris has not permitted me to multiply this experience, for a single case does not prove much. In tertiary syphilitic ulcerations it has seemed to me to increase the cicatrization. Thus a deep ulcerating gumma of the neck has been completely cured in the space of eight days under the influence of dressings of powdered aristol and mixed treatment, which consisted in daily frictions with blue ointment and the administration of four and then of six grammes of the iodide of potash per day.

I have used aristol in two cases of epithelioma of the skin deeply ulcerated, the one in a woman of fifty, who had already been treated by scraping and by applications of powdered chlorate of potassium. An elongated ulceration with calloused margins had persisted which, under aristol, cicatrized in fifteen days. The other case is that of a patient the entire upper part of whose cheek and lower lid are eaten out by an epithelioma declared inoperable by the surgeons. Twelve days of application of aristol in powder has much decreased the ulceration, and I am continuing the same treatment. I wish it

to be carefully noted that I do not speak of the curative virtue of aristol in epithelioma, in the same way that I have not spoken of its curative virtue in syphilitic ulcerations, and as I shall not presently speak of curative powers in dealing with tuberculous ulcerations. I only say (and I insist upon this point so that I will not be made to say what I do not wish to say) that aristol has in these ulcerations incontestable cicatrizing properties which have appeared to me even remarkable. Always in the same order of ideas the powder of aristol can be considered as an excellent topical application for ulcers of the leg. I have tried it in four cases of deep varicose ulcers. In two of these cases, as there were present two large and distinct ulcers upon the leg, I dressed one with powdered iodoform or with powdered subcarbonate of iron, while I treated the other and larger one with powdered aristol. Although these experiments have been restricted, I think I can conclude that aristol, combined with absolute repose of the leg, gives, in ordinary cases of varicose ulcer, a rather rapid cicatrix—that is to say, in about twenty-five to thirty days for an ulceration four to five centimetres wide, by six to seven long, and four to five millimetres deep. In a word, if the patient's general condition be good and the ulceration is not surrounded by dense callous cicatricial tissue of low vitality, the cicatrization advances at the rate of about a centimetre per week under the influence of aristol. The cicatrizing properties are thus seen to be altogether comparable to those of powdered iodoform and to those of subcarbonate of iron. It seemed to me that in one of my patients they were superior; in another, on the contrary, they seemed less powerful. It is probable that this cicatrizing action is more marked during the first few days of the application and then diminishes, and I therefore think there will be a certain advantage in employing successively the aristol, subcarbonate of iron, and iodoform in rebellious ulcerations. Aristol is less irritating than iodoform, and it is thus that in one of my patients, in whom I dressed one ulcer with aristol and the other with iodoform, I was obliged, at the end of six days of treatment, to suspend applications of iodoform, because the skin about the ulcer had become red, tumefied, and eczematous, while around the ulcer which was dressed with aristol the skin was normal. Aristol has also more marked irritating properties than subcarbonate of iron. In the same patient I dressed the ulcer with subcarbonate of iron which had been inflamed with iodoform. At the end of a few days it took on a healthy aspect and tended to cicatrize without the least surrounding inflammatory reaction. About the fifteenth day of treatment, on the contrary, there was produced all about the wound dressed with aristol a slight redness and a little discharge. The aristol gave me no result in one case of ulcer of the leg situated in the midst of callous friable tissue, without the least vitality. It is true, however, that no other treatment had succeeded. One of the affections against which aristol seems to me to have the most power is local tuberculosis of the ulcerating variety. I have treated for a long time an ulcerating lupus of the elephantine variety upon the foot, using cauterizations with lactic acid, dressings with camphorated naphthol and iodoform.

In fifteen days after aristol was begun, cicatrization of the ulcerations took place. Another tuberculous ulceration, developed on a scrofulo-tuberculous ulceration, closed under this dressing in twelve days. On the other

hand, salves of aristol have not yet appeared to give marked curative effects in cases of superficial non-ulcerating lupus, and in cases of lupus erythematosus. I am still carrying out experiments in this respect.

In a word, without wishing to unduly praise the therapeutic properties of a substance which I have just begun to employ, and reserving the privilege of modifying these opinions after a more extended trial, I believe that aristol may render very real services in ulcerations of the skin. It has no odor, and in this respect seems to me superior to iodoform; on the other hand, it does not soil as much as the subcarbonate of iron.

Treatment of Gummata of the Vault of the Palate.—The following, according to Professor Fournier, is the plan of treatment which should be followed in gummata of the vault of the palate: There is only one remedy, and that is the iodide of potassium. In view of the pressing circumstances, one is tempted to associate mercury with it. This is a bad practice. In the first place, the iodide acts quickly alone. Mercury can not be given by the digestive tracts, or the toleration of the stomach for the iodide will be diminished, and, on the other hand, you can not carry out mercurial frictions, for stomatitis will be rapidly produced. (It is true that there remain the subcutaneous injections of soluble and insoluble mercurial preparations to which Professor Fournier has not alluded). The iodide must be given as soon as possible and in as large doses as possible. The first day four grammes, and this increased each day by a gramme until eight or ten grammes per diem are taken. In the period of crudity of the gumma there is no topical treatment to be used. At most, one can prescribe an emollient gargle. When the gumma is open, however, the ulcerations must be dressed two or three times a day with tincture of iodine, and emollient and detergent gargles must be used, decoction of marsh-mallow and poppy heads, and medicated gargles containing four grammes of tincture of iodine and iodide of potassium in two hundred and fifty grammes of water; finally pulverizations may be prescribed. In fine, it is indispensable to cleanse the wound in all possible ways.

Treatment of Bubo.—According to Dr. Cordier, of Lyon, the procedure which has given him the best results in the treatment of bubo is as follows: As soon as oedema of the skin shows the presence of pus, he makes a puncture with a straight bistoury. There is discharged along with the blood some streaks of pus. No pressure is made, but the cavity is injected with about a cubic centimetre of a 1-to-50 solution of nitrate of silver. Without paying any attention to whether the solution flows out again or not, a dressing is made with iodoform and a spica bandage. When this slight operation is made early enough, no purulent discharge follows, and the bubo disappears rapidly in leaving behind a sort of indurated nodule. When the puncture is done in a bubo much more advanced and in full suppuration, the purulent collection must be carefully washed out. A first injection of the solution mentioned is made which is destined to cleanse the parts, and the second injection is left in; a decided inflammatory reaction is established and quite an abundant suppuration occurs and lasts for three or four days and then becomes serous. Healing takes place rapidly, and the opening closes without leaving a cicatrix. Dr. Cordier has had the same results, whether the bubo was chancreous or simply inflammatory.

L. BROCOQ.

PARIS, April 15, 1890.

Selections.

The French Dermatological Society.

THE first meeting of this new society took place in Paris on the 10th, 11th, and 12th of April, and many cases of interest were presented. Among them were especially noticeable three instances of chancre of the breast in women who had been given foundlings to suckle. They were presented by Dr. Beurmann. Strong measures were called for to prevent such disastrous results of giving syphilitic children to healthy wet-nurses. Nearly three thousand children are thus cared for in Paris each year, and among them are probably many who show this disease after they have passed into the hands of the nurse.

LICHEN PLANUS.—Dr. Feulard showed two cases of lichen planus in which could be plainly seen the coexistence and the passing over of colorless miliary lichen planus into lichen ruber and lichen verrucosus. Both patients had buccal lesions of lichen planus. This is regarded as a new argument in favor of the unity of the disease.

INTOXICATION BY IODOFORM.—Dr. Burlureaux points out the reaction of saliva upon calomel as a means of diagnosing iodoform poisoning. A yellow iodide of mercury is produced which is easily recognized, the reaction being very sensitive.

CUTANEOUS TUBERCULOSIS IN INFANCY.—Dr. Sevestre presented two children affected with tuberculosis of the skin. The first showed upon the dorsum of the hand lesions which recall the tuberculosis verrucosus of Riehl. On the feet were similar lesions, but less developed. Beneath the chin and in the parotid region were enlarged ganglia, which were suppurating. Koch's bacillus was demonstrated in the morbid products from the back of the hand. The tuberculosis appeared to result from a series of auto-inoculations. The other child presented osseous lesions of the same nature, as well as cutaneous tuberculosis.

Dr. Besnier said that whoever to-day spoke of scrofula spoke of tuberculosis; this condition is one of tuberculosis in lymphatic subjects. Internal medication must not be neglected, but the enemy is in the skin and must be attacked locally. The best means of destroying the process is by actual cautery, ignipuncture, or electro-puncture.

ATYPICAL CHANCRES.—Dr. Du Castel has recently observed two instances of multiple infecting chancre. The first patient showed thirteen lesions, the second seven. They did not appear simultaneously, but with several days' interval.

Dr. Mauriac said the unicuity of infecting chancre is a prejudice. It is often multiple. It does not appear that immunity is established for fifteen or twenty days. In all cases there is an interval between the appearance of the last chancre and the secondary manifestations.

Dr. Rollet spoke of the frequency with which mammary chancres are multiple. The diagnosis in the mixed sore is readily confirmed by auto-inoculation.

Dr. Barthelemy said multiple sores are frequent in subjects of the itch.

Dr. Fournier had seen as many as twenty-four upon the breast. The existence of two or three is not rare. Ricord had not regarded the sore as *always* single, but as *habitually* so.

CUTANEOUS ERUPTIONS OF LA GRIPPE.—Dr. Barthelemy had observed two hundred and nineteen cases of grippe in the late epidemic, and found skin lesions frequent. 1. There were the simple coincidences—furuncles, anthrax, eczema. 2. Divers erythemas, which appeared in relation with the existence and evolution of the grippe. There were rashes which preceded the disease just as rashes precede the eruptive fevers. They were mostly morbilliform or scarlatiniform, the former being the more frequent. In one case there was a pityriasis-like eruption, and in another a vesicular outbreak. The scarlet-like eruption recalled descriptions of the dengue.

THE NON-SPECIFIC NATURE OF THE GONOCOCCUS.—Dr. Eraud presented a communication showing that in the normal urethra microbes exist. In the infant the staphylococcus alone is found. In the adult, in addition to this, there is a diplococcus closely resembling the gonococcus. By intratesticular injections of this diplococcus an orchitis may be determined, but not a blennorrhoeal discharge.

Dr. Verchère objects to the writer's view that the diplococcus does not have the characteristics of Neisser's gonococcus, and there is nothing surprising in the association of various microbes in the gonorrhoeal discharge. He thought nothing was proved by it.

Gangrene of the Fingers after the Use of Carbolic Acid.

DR. BARRET DE NAZARIS showed at the Soc. d'anat. et de phys. de Bordeaux the right middle finger of a man which had been amputated for sphacelus following a rat bite and the application of strong phenic acid by mistake for the weaker solution which was employed as a dressing. Numbness was first produced, and then mortification of the superficial tissues.

The speaker thought the condition similar to that named by Lucas-Championnière and Monod as *sphacèle phénique*.

Dr. Warfield, of Baltimore, has recently read a paper on this interesting subject of carbolic-acid gangrene (Medical News, April 12, 1890), and relates a personal observation. In October, 1889, an intemperate Irishman, fifty years of age, had applied to him for the relief of a gangrene of the right index finger. Four days previously he had crushed the member and applied a strong carbolic-acid solution. This had caused considerable pain at first, but, the pain disappearing, the dressing was left on over night. The next day the finger was found blackened and inflamed. The gangrenous portion was sharply separated by a beginning line of demarkation, and, beyond a slight œdema of the back of the hand, the surrounding parts were normal. Under bichloride irrigation and iodoform ointment the patient was discharged in two months, with a stiff and deformed finger. Since the literature of this subject dates only from 1888, at which time Kortüm published an article on Karbol-Nekrose, the reader makes a review of the cases reported, which, including his own, amount only to about twenty, and of these only six were reported in detail. It is a noteworthy fact that the gangrene was frequently

produced by weak solutions, several being not stronger than eight, and one only two per cent. In the author's own case he suspects the strength to have been at least fifty per cent. As regards the *modus operandi*, Kortüm thinks the action of the acid upon the peripheral nerves may be associated with trophic changes in the nerves underlying the applied acid, and local death result. The fact that gangrene has been seen only in the fingers where nerves are abundant may favor this view. Another point of interest developed from the study of the reported cases is that complete envelopment of the circumference of the finger seems essential to the production of gangrene. The gangrenous part corresponds to the skin area in relation with the drug. The author condemns the employment of strong acid to the whole circumference of an extremity as well as dilute solutions long applied.

Factitious Urticaria ; Autographism.

SEVERAL observations on urticaria which can be called forth at will have recently been published. Dr. Waldo and Dr. Harrison each relate a case in the Bristol Med.-Chir. Journal for March, 1890.

In the first there was such excessive irritability of the cutaneous nerves that wheals could be excited by the local irritation of a blunt-pointed instrument, white letters with pink borders being caused to stand out in relief upon the skin. A spasmodic contraction of the vessels is supposed to take place, followed by paralytic dilatation and stasis or retardation of the circulation in the papillary layer. Serous exudation then ensues, producing acute cedema, which lifts up the epidermis into a wheal. This is pink at first, but as the fluid increases the blood is pressed out of the center, causing it to grow white while the periphery becomes more hyperæmic.

Benefit was obtained in Waldo's case from the application of carbolic acid and of dusting powders containing camphor.

In Harrison's case the slightest blow would be followed by a distinct whealing, and tracings on the skin were almost immediately followed by raised wheals surrounded by a suffusion of the skin. A brother of this patient was similarly susceptible. Ergot gave the best results, but drug treatment seems to be rather inoperative. The medico-legal aspect of such cases is referred to. For instance, should a school-teacher strike such an individual in a very moderate way, the appearances caused would be out of all proportion to the severity of the punishment, and undue violence might be unjustly claimed. These curious phenomena of vaso-motor reflex action are known in France under the name of *autographisme*, under which term Mesnet has communicated four observations to the Academy of Medicine (La semaine médicale, April 5, 1890). The cases were observed for several years and confirmed knowledge of their nature already possessed—the coexistence with fixed and persistent trouble of peripheral sensation ; analgesia, general and partial anesthesia of the skin and mucous membranes ; often functional troubles of the organs of special sense, particularly of taste and sight ; frequency of convulsive attacks and facility with which the subjects may be hypnotized, a moral condition characteristic of hysterics. Dr. Mesnet has emphasized the point that the autographic reflex is produced as clearly and as quickly on the anæsthetic portions of the skin as upon the sensitive regions,

the sensation of the instrument tracing the figure upon the surface not being at all necessary to the apparition of the wheal. According to this writer, the mechanism of this angio-neurosis is certainly that of common urticaria at its greatest intensity. Recalling the facility with which hysterical individuals subject to autographism are hypnotized, the author offers the hypothesis of a parallelism between the peripheral vaso-motor troubles and the dynamic cerebral perturbations which accompany hypnotism. These consist in an intimate and profound trouble of the capillary circulation of the brain. In concluding his interesting communication, Dr. Mesnet recalls that in the middle ages hysterical stigmata were looked upon as the marks of the hand of Satan, and brought to the stake many poor neurotics condemned as sorcerers.

Quite an interesting case of autographism was recently brought before Fournier's clinic at the St. Louis Hospital in Paris. The patient was about forty years of age, blind, and pale, but strongly built, presenting the appearance of an athletic person of great muscular strength, short and stout. Some months ago he presented himself at one of the hospitals with a fever, cold in the head, and the chest covered with an eruption. The case was diagnosed as measles, the fever went away in a few days, and he left the hospital and went to another with large, red marks all over his body, and the case was considered scarlatina. As his throat was still sore and he seemed to get worse, the doctor thought it must be small-pox, and he was about to be sent to the small-pox hospital, when he was seen by Dr. Besnier, who pronounced the man to be a "*similateur*." This was found to be true. The man was able with the point of a pen or pencil to produce in a few moments on his skin the characteristic signs of almost any skin disease.

Generalized Pigmentary Syphilide.

THE subject of the nature of pigmentary syphilides has been much discussed, but, so far as known, the spots have not previously been studied microscopically. Audry (*Annales de dermat. et de syph.*, Feb. 25, 1890) relates a case of this interesting generalized form of the affection, with the result of histological examination.

The patient was a brunette, nineteen years old; both parents and a sister dead of consumption. Late in 1888 she contracted syphilis, and on January 6, 1889, had a secondary papular syphilide over the whole body. In May of the same year, after developing signs of pulmonary phthisis, a very generalized pigmentary syphilide occurred, and (a condition rarely pointed out) several dark spots appeared upon the face. There were three on the forehead, three on the left naso-labial commissure, and others on the opposite side, chin, and lower lid. They were numerous on the lateral regions of the throat, the neck, and the back. In all there were about fifty in these regions. There was absence of elevation, desquamation, pruritus. The shape was usually round or oval, and around the lesions was a white zone, in appearance devoid of pigment. According to the patient, the spots were slowly losing their pigment, the diminution taking place from the periphery. The lips, gums, hands, and feet were free. The eruption persisted without modification until death, which took place on the 4th of July.

Sections of skin were taken, eight hours after death, and prepared in the

usual way. The spots were shown to be constituted by a pigmentary infiltration composed of small, yellowish blocks, themselves formed by finely aggregated granulations.

These blocks occupied especially the cells of the generative layer and, to a slight extent, those of the juxta-generative layers of the Malpighian body. They communicated to the infiltrated zone a light sepia tint, clearly appreciable even when low powers were used. The blocks of pigment were also found here and there in the papillæ, and they were also seen in the very superficial layers of the derma. There was no pigment around the hairs. There was no trace of inflammatory or cicatricial infiltration. The arterioles and capillaries appeared intact, and there was no trace of remote or recent hemorrhage. The same appearances were, in fact, present as would be found in the negro skin, excepting that in the latter the pigment would be naturally more abundant.

The pigment is situated in the deep layers of the epidermis and the superficial layers of the derma. That it is brought from the region of the derma by the pigmentiferous corpuscles the author has no doubt, and thinks his own case, as well as the observations of Riehl and Bockhart, substantiate the view. He was not able to confirm the observation of Tanturri and Saintin that the whitened zone surrounding the spots in reality contained more pigment than the normal skin, because his attention was not called to the question; but he did fail to find the evidences of chronic inflammation (*dermatite syphilitique*) which Saintin regards as the origin of the pigmentation. The opinion of Neumann and Riehl that the condition is a vitiligo the author thinks certainly erroneous.

Antisepsis in Variola (A. Bianchi).

THE writer attempted to carry out a careful antisepsis in the treatment of variola under the supposition that the pustules studding the skin of the patients acted as foci for the further extension of the disease, and again that the bodies of patients suffering from variola were more accessible to pathogenic influences from without than healthy ones. The writer recapitulates his experience of six years upon ninety-six patients with this method.

1. The antiseptic treatment of variola patients by means of baths, antiseptic washings and inunctions, sterilization of the clothing, the bed, and of the surroundings of the patient, is according to sense, necessary, and humane. It combines the therapy and hygiene of variola.

2. Clinically it has the advantage of alleviating the severity of the period of eruption, to suppress injurious and long-continuing fever movements, to completely ward off graver complications and after-diseases of the skin and intestines, to produce a bearable condition for the patient, and to induce a rapid convalescence, from which the patient issues without a mark of the disease upon the face or body. Out of ninety-six patients—of which forty-two assumed a light, thirty-nine a grave, and fifteen the gravest form—only one died. This one perished of a complicating pneumonia which had already begun *during the stage of suppuration and before the beginning of the treatment*.

3. Bacterioscopic investigation demonstrates that by this method of treat-

ment one succeeds in keeping micro-organisms, capable of exciting suppuration, from the pustulous eruptions of the skin.

4. It shows that, with the help of antiseptis, secondary infection of the primarily infected organism may be prevented.

5. The method is of prophylactic value, inasmuch as the danger of infection is removed from the immediate surroundings of the patient and the further extension of the morbid material prevented.

6. Hence it deserves a general application in the treatment of variola patients.

The following schema will serve to show how Bianchi practically carried out antiseptis in the treatment of his patients :

I. Variola mitis.	{	Stage of eruption.	{	One daily washing with corrosive-sublimate solution (1 per cent.).
		Stage of pustule formation.	{	Two daily washings with boric-acid solution (5 per cent.).
		Stage of exsiccation.	{	Two daily washings with corrosive-sublimate solution. Four daily washings with boric-acid solution.
II. Variola gravis.	{	Stage of eruption.	{	Two washings daily with corrosive-sublimate solution. One boric-acid (5 per cent.) bath daily.
		Stage of pustule formation.	{	Two daily washings with corrosive-sublimate solution. Two daily washings with boric-acid solution.
		Stage of exsiccation.	{	Three daily washings with corrosive-sublimate solution. Three daily washings with boric-acid solution.
III. Variola gravissima.	{	Stage of eruption.	{	Two daily washings with corrosive-sublimate solution. Two daily washings with boric-acid solution.
		Stage of pustule formation.	{	Four daily washings with corrosive sublimate. As many boric-acid washings as seem necessary.
		Stage of exsiccation.	{	Three daily washings with corrosive-sublimate solution. Three daily washings with boric-acid solution. One boric-acid bath.

After every washing, the entire body, or those portions of the skin attacked by the eruption, are rubbed with one- to five-per-cent. iodoform vaseline ; a five-per-cent. unguent is used preferably in the stage of ulceration. No disagreeable action was noticed from the inunction hindering cutaneous transpiration or the absorption of iodoform. Where the antiseptic treatment is begun late, or is insufficiently carried out, and the formation of pustules is not entirely prevented, then puncture of the latter is necessary. The beds of the patients were protected by large antiseptic veils ; the patient himself lies in antiseptic sheets. The surroundings are rendered antiseptic according to the generally recognized principles.—*Lo sperimentale*, June, 1889.

Scrotal Pneumocoeles.

ACCORDING to M. Verneuil, in a communication before the Academy of Sciences, February 24th, the scrotum sometimes becomes the seat of a diffuse

or circumscribed tumefaction, having for its anatomical cause the presence of infiltrated or collected gases, and for its pathognomonic sign sonority on percussion, with or without gaseous crepitation.

This rare affection was known under the name of emphysema of the scrotum or of the tunica vaginalis, a designation insufficient to indicate all the forms of the affection and which he proposed to replace with that of serotal pneumocele. It presented several varieties, according to—

1. The points occupied by the gas: (*a*) subcutaneous pneumocele, (*b*) vaginal or serous pneumocele.

2. The chemical nature of the gas, (*a*) aërian pneumocele—that in which the gaseous mixture contained exclusively the elements of atmospheric air; (*b*) bacterial pneumocele, when the aërian gases are mixed with putrid gases.

3. The manner in which the gases react upon the tissues which contain them and upon the entire economy: (*a*) benign pneumocele, (*b*) malignant or septic pneumocele. In fine, two principal forms: 1, benignant aërian serotal pneumocele, whatever its seat, subcutaneous or vaginal; and 2, malignant bacterial serotal pneumocele, occupying the connective or the peritesticular serous tissue.

Scrotal pneumoceles are never idiopathic, but always preceded by a local or distant lesion. The local lesions are wounds of the scrotum with introduction of atmospheric air, hydroceles or hæmatoceles in which the gas appears spontaneously or results from a puncture with the trocar. The remote lesions may be: 1. Wounds of the air passages and adjacent cavities of the head and neck. 2. Wounds of the intestine in the abdomen, the ano-rectal or hernial region. 3. Wounds which, whatever their seat, are complicated with aërian or bacterial emphysema, and the gases from which are infiltrated to the scrotum. 4. All phlegmons situated in the proximity of the genital apparatus.

In subcutaneous or vaginal aërian pneumocele the accidents are local and without importance; the prognosis is favorable and the treatment consists of simple punctures. In bacterial pneumocele the symptoms are those of phlegmons, grave inflammatory œdemas, even gaseous gangrene; the prognosis is very grave. As to treatment, it should not only be as prompt as possible, but most energetic, demanding large incisions, often serotal resections, and sometimes even castration.—*La tribune médicale*, March 6, 1890.

Therapeutic Effects of Heat on Syphilis.

DR. K. A. P. Y. KALASHNIKOFF has made a series of observations on the therapeutic effects of heat on syphilis, and especially on syphilitic eruptions, his patients being inmates of a St. Petersburg lock hospital for women and children. The heat was applied where possible by means of partial hot-air baths administered to the affected part for half an hour twice a day, the part being enveloped in hot flannel immediately afterward, and remaining so protected until the next hot-air bath. The temperature never exceeded 116° F. Where the eruption was on the back or neck, or on some part which it was impossible to insert in a hot-air chamber, India-rubber hot-water bottles, or tubes through which hot water was kept flowing, were employed. When both arms or legs were affected in a symmetrical manner the treatment was

confined to one side, the other being left untreated for the purpose of comparison. The results showed that, generally speaking, the heat treatment acted very energetically and beneficially on syphilides, both when employed alone instead of mercurials and iodides, and also when used in conjunction with these remedies. Often heat proved beneficial when the ordinary specifics had failed. Among other observations it was noted that hard chancres healed and the induration disappeared in from eight to sixteen days; roseola and papular erythema disappeared in from four to eight days; various forms of papular and impetiginous syphilides with marked pigmentation disappeared in from eight to twenty-one days; non-ulcerated tubercles and gummata disappeared in from seven to twenty-four days, but those which had already begun to ulcerate required from one to six weeks; periostitis was cured in from ten to twenty-four days; osteoses were not affected; syphilitic ulcers, consequent on the breaking down of gummatous periostitis, required treatment of from six weeks to three months or more; and necrosis of bone frequently required many months' treatment before the sequestra could be got away.—*Edinburgh Med. Journal*, No. 257.

Guyon on Retention of Urine.

M. GUYON has arrived at the following conclusions from his experimental researches concerning the pathological anatomy and physiology of the retention of urine: This affection invariably develops in an aseptic and non-febrile form. It is only after septic intervention or in patients previously infected that fever appears. In human beings, retention of urine is always accompanied by polyuria; this symptom is determined by the repletion of the bladder. Another result of retention is the inflammation of the entire urinary apparatus. The prostate and the kidneys are increased in size; their volume is diminished by the repeated use of the catheter. M. Guyon determined inflammation of the bladder, kidneys, pelvis, ureters, and prostate in animals. The bladder and kidneys were principally affected. There was stasis of the blood-vessels and interstitial hæmorrhage. The muscular layer of the bladder was detached by the sanguinolent effusion; the epithelium was also detached in parts; there were extensive patches of ecchymoses on the interior surface; the urine was mixed with blood. The kidneys were increased by one sixth of their normal volume; there was hæmorrhage; hæmatic or epithelial cylinders were detected in the urine. When the bladder suffered sustained tension, the urinal secretion was diminished instead of being increased. The kidney was directly threatened. The protection afforded by the uretero-renal current, which in a normal state isolates it from the bladder, is suppressed when the retention of urine is prolonged. The introduction of inert particles or micro-organisms becomes possible in a stagnant medium, where the normal currents of the ureter and bladder are suspended, and the microbes, instead of being repulsed or relegated to the bladder, ascend to the kidney. The distension suppresses the contractile power, first of the bladder, and subsequently of the ureter. The degree and intensity of the tension determine the anatomical lesions and physiological disturbance. From the bladder it spreads to the ureter and kidneys. When the bladder is completely filled, the urine which continues to be secreted passes

into the ureter, renal pelvis, and canaliculi, but these do not relieve the bladder from the excess of urine it contains. There is no reflux in acute retention. The bladder is first affected in the retention of urine. The immediate or remote results of this affection depend on the moment intervention is effected, whether before or after the upper urinary apparatus is attacked.—*British Medical Journal*, March 15, 1890.

The Coexistence of Psoriasis and Syphilis of the Skin.

PROFESSOR NEUMANN writes in No. 7, 1890, of the *Wiener med. Wochens.* on the coincident appearance upon the skin of syphilis and psoriasis vulgaris.

Just as psoriasis shows a tendency to occur upon regions subject to chronic hyperæmia, so does syphilis occur on parts where chemical or mechanical irritation has existed.

Two instances from the writer's clinic illustrate the combination of the two diseases. Subsequent to antisypilitic treatment, which removed the specific lesions, those of psoriasis remained unaltered.

Microscopical examination showed the ordinary appearances of psoriasis. The dilatation of the vessels which characterizes psoriasis can with certainty be said to furnish a favorable condition for the development of syphilitic efflorescences.

Differentiation is made by the nature of the color, which in syphilis has a more or less darker shade; by the course, since the syphilitic products are soon brought to resorption by an antisypilitic course while it leaves the psoriasis intact; and finally by microscopical examination, which, while the individual round cells in both diseases are the same, in syphilis pigmentations appear, while in psoriasis this has never been observed.

Nitrate of Cocaine in the Urinary Passages.

DR. LAVAUX thinks the nitrate of cocaine should replace the hydrochlorate of the drug for genito-urinary employment, where nitrate of silver is to be used. In the *Journal de méd.* of March 23, 1890, he relates some experiences with the nitrate in connection with somewhat strong nitrate-of-silver injections. The following formula is given as one recently employed in gonorrhœa without the production of pain :

℞ Distilled water.....	50 grammes;
Nitrate of cocaine....	1 gramme;
Nitrate of silver.....	1 “

The canal is to be washed out with a four-per-cent. boric solution before and after injection.

The nitrate of cocaine is readily prepared by pouring a solution of the hydrochlorate of cocaine into a solution of nitrate of silver. By double decomposition a precipitate of chloride of silver, wholly insoluble, falls down, and the nitrate of cocaine remains in solution.

Treatment of Blennorrhagia in the Female.

SCHMITT (*Revue méd. de l'Est*, No. 19, 1890), in an interesting paper, points out that the seat of gonorrhœa in women varies with their station; thus, in prostitutes who undergo regular examination, the urethra and neck of the

uterus are nearly always affected. In clandestine prostitutes, having recently become infected, the urethra, vagina, and uterine neck are implicated. In the woman who comes of her own accord to the doctor because she feels something the matter, there is usually urethritis and vulvo-vaginitis. Vulvitis is only observed in recent cases, and quickly gives way to treatment. Erosions may be touched with a 1-to-20 nitrate-of-silver solution. Applications of 1-to-1,000 bichloride may cause the inflammation of a beginning Bartholin's glanditis to disappear. Nitrate of silver should also be used to destroy the crypts and glandular follicles about the urethra and fourchette.

Vaginitis, the author believes, may occur as a morbid entity, as well as secondary to urethral and uterine gonorrhœa. A special treatment is called for, of which antiseptics form the base. In the subacute period an antiphlogistic and emollient medication is indicated; when the inflammation has moderated, irrigation should be practiced two or three times daily with 1-to-10,000 binoide solution; then the vagina should be packed with cotton soaked in an iodoform glycerin, and, later on, tannin should be sprinkled over the parts. In ten or fifteen days the vaginal discharge will have disappeared.

In *urethritis* the balsamics are ineffective, while local treatment is more successful than in the male. A stick of nitrate of silver, passed over the first half of the canal, will often serve to arrest the disease in its incipency. Later on a 1-to-50 solution can be instilled daily. In chronic cases the whole length of the canal can be cauterized with the silver stick.

Metritis often remains after the disease has been elsewhere cured, and it is often a source of reinoculation of the neighboring parts. Usually the neck alone participates in the inflammation, but at times the uterine body is affected, especially when it has been enlarged from pregnancy. Curetting the uterus and subsequently using parasiticide injections may be attempted in rebellious cases, but the vast majority will get well after cautery of the interior with the nitrate-of-silver stick, carried as high up as possible and repeated several times. When there is ulcerative metritis the ulceration is treated with the silver at the same time, and then covered over with salol, which has a very marked action on affections of the neck, blennorrhagic and other.

Along with local measures, a general treatment should be carried out.—*Annales de dermat. et de syph.*, March, 1890.

Items.

The Coincidence of Diabetes in Husband and Wife.—Debove (*Société méd. des hôpitaux de Paris*, 1889, juillet) a few years ago saw a patient under circumstances that attracted his attention in a singular manner. The wife of this patient had diabetes; suspicious that the pharmacist had not carefully examined the urine, he sent his own instead. The examination revealed a considerable amount of sugar. As the affair appeared to him laughable, he sent another quantity of urine to another pharmacist. The analysis again revealed sugar. Debove had a man, aged fifty years, under observa-

tion whose urine contained about sixty grammes of sugar to the litre; he died from interstitial nephritis. His wife was at the time diabetic and is so yet. During the past year the author observed two additional cases of conjugal diabetes. In the first case, in the husband the urine contained forty-nine grammes of sugar to the litre, in the wife thirty-three grammes to the litre. In the second cases the quantity of sugar was not estimated. Altogether Debove observed five cases of the coincidence of diabetes in married people, and thinks that were the urine of both parties more frequently examined their number would be increased. M. Lecorché in his work *On Diabetes in Women*, explains this coincidence as follows: 1. The use by both husband and wife of the same unsuitable and defective nourishment. 2. The community of care, mental worry, etc.—*Wiener klin. Wochenschrift*, 1890, 6.

Boroglycerin Cream.—The following preparation is said to be excellent for chapped hands, lips, etc.:

Dissolve one part of boric acid in twenty-four parts of glycerin; add to this solution five parts of lanolin free from water, and seventy parts of vaseline. The preparation may be colored and perfumed.

The Treatment of Angiomata by Electrolysis (Th. Gessler. Inaug. Dissert., Tübingen, 1889).—The statistics of the Tübingen clinic show that in the last ten years 213 patients—151 female and 62 male—were treated for angiomata. The tumors were situated on the scalp, face, neck, and ears in 168 of these cases.

For purposes of comparison, the author makes use of other statistics on this subject, and finds that among 1,265 cases the female sex was affected doubly as often as the male. Seventy-six per cent. of the growths were located on the head, three per cent. on the neck, eleven per cent. on the trunk, and nine per cent. on the extremities.

The treatment used by Professor Bruns, even in the severest cases, was the following: Two platinum needles were crossed through the base of the tumor and connected with the poles of a constant battery. The connections are then made and the current allowed to pass for ten minutes. Shortly before withdrawing the needles, for the purpose of preventing bleeding, the current is changed. An iodoform dressing is then applied. In one or two months, if necessary, this procedure is repeated. Gessler gives a detailed account of the treatment of ten cases with electrolysis and the results obtained. Of this number, two did not return after treatment and one was yet undergoing treatment. The other seven were completely cured with smooth cicatrices, in spite of the fact that the tumors covered a considerable surface and extended deeply.

In conclusion, the author states that it is the severe cases especially that the electrolysis deserves the preference over other methods of treatment.—*Monatshefte für prakt. Dermat.*, Band x, No. 5.

Pathological Anatomy of Lupus Erythematosus (Dr. Josef Schütz. *Archiv für Dermatologie und Syphilis*, Heft 1 u. 2, 1890).—The author exhibited before the *Naturforscher Versammlung* at Heidelberg a number of microscopic preparations made from an excised patch of the discoid variety of the disease which had not been subjected to treatment. The diseased tissue taken from the scalp, being rich in glands, afforded an excellent opportunity to study the early stages of the affection. Schütz concludes that the first pathological changes take place in the blood-vessels of the papilla, but that this inflammatory deposit is probably induced by the hypersecretion of the sebaceous glands acting as an irritant. This view is rendered plausible from the fact that the first appearance of an infiltration is about the openings of the sebaceous glands and enlarged hair follicles. The clinical fact that a lupus erythematosus develops from a local seborrhoea or an acne rosacea supports this view. A diligent search for micro-organisms (staining after Gram, Löffler, Kühne) revealed nothing.

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Original Communications.

DIPHTHERIA OF THE MEATUS URINARIUS.*

By F. TILDEN BROWN, A. M., M. D.,
New York City.

IN 1880 Dr. Lange reported having been called to a case of penis diphtheria in a child after circumcision. The preputial wound was first attacked, and, despite two searching applications of the actual cautery, the disease spread over the glans to the meatus and threatened to invade the urinary tract. At the time of operating upon this child laryngeal diphtheria existed in the family, one brother having shortly before died, and another developed the disease subsequent to the operation. A recent interview with Dr. Lange regarding the final result in the first-mentioned case elicited that the diphtheritic process did not invade the urinary tract beyond the meatus, that constitutional symptoms were not appreciably developed, and that recovery was complete.

I will not detain you with bibliography, but would refer to a single author, Jacobi,† who devotes some space to this variety of diphtheria, presenting therein his personal experience and a review of what pertains to the subject from the writings of others.

In order to emphasize three points of apparently trivial importance connected with my case—viz.: 1st, slight excoriation of the meatus noticed before and at time of operation; 2d, non-enlargement of inguinal glands; 3d, non-involvement of the pharynx—I will here directly quote Jacobi's opening remarks:

“Diphtheria of the genito-urinary organs does not often occur. However, I have proofs of its appearance, even as a primary disease. The

* Read at the fourth annual meeting of the American Association of Genito-urinary Surgeons, June 4, 1890.

† A. Jacobi, M. D. A Treatise on Diphtheria, pp. 86. William Wood & Co., 1880.

rarity of its occurrence, and the fact that, occasionally after delivery, the abrasions of the vagina arising during labor become covered in twenty-four hours with a diphtheritic membrane, would seem to indicate that, where diphtheria of the vagina is found in children, it is probable that the disease had its local foundation in a catarrh or *erosion* of that locality. Undoubted cases of that kind I have seen several times in the course of the last few years. In but few cases I have seen an infiltration of the neighboring inguinal glands; and in but a single case can I positively claim to have seen diphtheria of the pharynx following a diphtheria of the vagina, this taking place in an adult upon whom an operation was performed."

My patient was J. L., nineteen years of age. Constitution delicate. Parents living and healthy. No sickness in the family. The patient had never exposed himself to venereal disease.

At the age of sixteen he began masturbation, continuing the practice two or three times a day for a year and a half. Then, first learning its injurious consequences, he ceased abruptly, only to be troubled with seminal emissions, happening about three times a week. For this trouble he came to me in March, 1890. Examination showed a long phimosed prepuce, which, retracted to the utmost, uncovers only the meatus and a trifle of the surrounding glans. The meatus appeared moist and slightly excoriated.

I advise circumcision, which is done a few days later (on March 21st). Under antiseptic precautions the prepuce is removed with scissors over the clamp. Ten points of interrupted suture are inserted, the wound thickly dusted with iodoform, and the glans and penis snugly secured with a dry gauze bandage. Then the whole organ is loosely covered with a large piece of antiseptic absorbent cotton. The patient is directed to buy cotton of the same kind and apply a fresh piece after each urination. This special precaution is taken because of the moist and eroded condition of the meatus existing now, as it was the first time I examined him, a week previously.

March 23d (two days later). The patient reports that frequent nocturnal erections have disturbed him a little, and that a slight smarting at the meatus on urination has been noticed.

On exposing the parts for redressing, the patient takes off a large piece of common dirty household cotton. This had been furnished by his mother as a substitute for the cotton I had ordered him to purchase. When it is removed I see over the meatus a grayish-white, semi-translucent mass, suggesting a piece of wax or heaped-up vaseline. As the douche does not remove it, and as it resists being lifted with forceps, scissors are used to snip its semi-elastic attachments to the border of the meatus. This specimen was eleven millimetres long, six wide, and three high. It was erected over the meatus like a diminutive cock's comb. On its removal several minute bleeding points appeared on the grayish, infiltrated, and slightly oedematous tissue below. The infiltration was sufficient to obliterate any ocular evidence of the meatus.

An immediate microscopic examination of a teased particle of this speci-

men strongly aroused my suspicions. A minute portion of the specimen, cut from its center with sterilized scissors, was teased, pressed, and rubbed between two cover-glasses, dried and stained—one cover glass with gentian violet, the other decolorized after Roux, but no contrast stain added. Both of these mountings I now show you. Apart from the merest trifle of fibrillar or mucoid tissue the entire field is made up of cocci, diplococci, and streptococci, in clusters and chains, besides three varieties of bacilli, one of which latter is of club-end variety, and might be claimed morphologically to be Loeffler's bacillus. But I would express all of this guardedly, because Dr. Prudden, who recently has kindly examined these slides, states that to speak authoritatively as to the presence or absence of the specific bacteria of diphtheria from morphological appearances alone was not in accordance with his practice. Immediately after its removal the rest of the specimen was taken to a pathologist for cultures and further examination, but was accidentally destroyed the next day.

Carefully disinfecting the meatus and glans, the bandage is now removed from the circumcision wound, which is found in a most satisfactory condition, not only free from sepsis, but showing not the slightest cedema at any part, with its mucous and cutaneous surfaces in perfect apposition, attributable to the snugly fitting gauze bandage, including the entire organ nearly up to the meatus.

To shorten the history, I here state that the preputial wound, which was dressed nearly every day, healed by first intention throughout, and, apart from the advisable delay in removing the sutures, behaved as any other such operation should.

The day following (March 24th) the patient was experiencing slight chilly sensations, and had still a slight burning at the meatus. His sublingual temperature was 97.6°, pulse 76. The meatus and that part of the glans penis immediately surrounding it is raised up in a nipple-like process; a grayish-white, pultaceous membrane, with adherent and imbedded iodoform, overlies this prominence, and I am unable to remove it except in very small, friable pieces torn away with forceps, but, after painting the part with pure "sulpho-calcine," I succeeded in a few minutes in lifting one edge of the membrane under forceps traction, and, by repeated swabbing at its attachment to the glans, I succeed both in exposing the meatus where the membrane is thickest, and in uncovering the surrounding portion of the glans where the membrane thins out to a mere film. After this removal the protruding nipple-like meatus appears grayish and slightly ragged; the parts surrounding it present a moist, glistening hyperemia.

No appreciable induration accompanies the infiltration around the meatus. The inguinal glands are not enlarged. Ordered repeated local applications of sulpho-calcine and iron and quinine internally.

March 25th. The next day patient is feeling chilly. Temperature, 100°; pulse, 100. Entire penis noticeably enlarged. Meatus and surrounding glans presents a dense, sodden, yellowish-gray membrane. This is a very dry, inelastic membrane, reaching a considerable thickness at the meatus, as is shown by spreading the meatus with forceps. Upon relaxing this distension the lips very slowly come together again. This membrane, unlike that

previously formed, can not be detached, except by undue violence to the part. Ordered one thirty-second of a grain of bichloride of mercury every two hours.

March 26th. Find the patient in bed. For the past twelve hours the patient has felt headache, dull aching pain in the back, in the urethra, and behind the testicles. At the morning micturition the urine issued not at the meatus, but laterally from under the considerable membrane overlying it. Examination explains the cause of this. Necrotic action with suppuration has occurred under a considerable part of the membranous scab, and here the resistance to urine pressure was much less than that offered by the dead inelastic meatus. With scissors and forceps I can remove this covering nearly entire from the glans.

Preserved since then in alcohol, I now show it considerably shrunken—about twenty millimetres in diameter. In its center notice a perfect cast of the meatus.

On the removal of this tip of the penis, which represents the raised-up infiltration noticed for the past few days and now shed by necrotic action in its deeper layers, a shallow crater remains.

At this visit the patient passed nine ounces of clear urine, which, on examination five hours later, shows: Specific gravity, 1.009; sediment very slight; reaction neutral.

Microscopical Examination.—Only a few fine linen and cotton fibers, with a small quantity of pigmented, amorphous *débris*.

Chemical Examination.—Distinct trace of albumin by nitric-acid zone test.

Two ounces of urine passed later the same day gave: Specific gravity, 1.025; color normal, but much darker than before; sediment, a floating mucoid mass, such as occurs in slight oxaluria; reaction acid.

Microscopical Examination.—Very few blood-corpuscles; very few renal epithelial cells; oxalate-of-lime crystals.

Chemical Examination.—A heavy trace of albumin.

March 27th. The physiological shedding of the diseased portion of the glans and meatus was the final stage of the active local process in this case, and the subsequent details in the healing of the open ulcer are of no special importance. Under cleansing treatment with peroxide of hydrogen the parts cleaned and cured slowly, resulting, three weeks later, in a normally covered and but slightly deformed glans. The meatus, however, was contracted to 12 French, whereas it would formerly, I judge, have taken a 24 French. A glance at this lost tip of the glans, containing the open meatus, will support this estimate.

During the next two days the quantity of albumin increased, but was never at any time greater than would be caused by a mild parenchymatous nephritis. The blood-corpuscles decreased in number, while renal epithelial cells, in a condition of granular degeneration, increased. Casts were at no time found.

Five days later every evidence, microscopic and chemical, of renal trouble had disappeared. Tendon reflex had not been appreciably altered. No paralysis accompanied convalescence.

I present the small details of kidney affections because they furnish almost the only evidence of any diphtheritic constitutional involvement, but sufficient, I think, to help support my diagnosis when taken in conjunction with the local lesion with its clinical manifestations, and in conjunction with the somewhat confirmatory bacteriological examination.

Let me briefly review the points of interest in this case :

1. The novel manner of inoculation : dirty cotton, upon a site—the meatus urinarius—not commonly the primary one in genito-urinary diphtheria.

2. The rapid development (thirty-six hours) of a considerable wax-like mass consisting wholly of various bacteria.

3. The non-appearance of disease in the circumcision wound, proving that the instruments and dressings concerned in the operation were not the channels of infection.

4. The subsequent limitation of the disease to the meatus and glans penis—i. e., 1st, the successful protection of the circumcision wound by carefully applied antiseptic dressings ; 2d, the non-involvement of urethra and deeper urinary organs, and that this extension was presumably opposed by the physiological barrier of normal acid urine, Billroth and others showing that vesico-vaginal and urethral diphtheria following operation wounds and accidental abrasions requires for its development and maintenance, besides the exposure to specific infection, an alkaline condition of the urine.

I shall hope to hear freely expressed all the reasons which have occurred, as presumably many have, for dissenting from the diagnosis of diphtheria in this case.

40 EAST THIRTY-FIRST STREET.

SCARLATINIFORM ERYTHEMA IN TYPHOID FEVER.

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THERE is, perhaps, no class of diseases within the broad domain of dermatology which possesses more interest, both in a pathological and in an aetiological point of view, than the erythemata. To an investigator this class becomes invested with so much of the alluring as to easily lead him into the speculative domain of medicine. The subject, however, is so vast and comprehensive as to preclude the possibility of its consideration within the narrow limits of an essay. For this reason I have taken up but one special form of a certain variety of the erythemata, which has been of some interest to me for two reasons—viz., its comparative infrequency, and the scanty literature which has been devoted to it.

The literature of erythema, as well as that of typhoid fever, contains but a few allusions to the scarlatiniform erythema, or, as it is called by some authors, the desquamative scarlatiniform erythema of typhoid fever.

I have thought that a brief review of the cutaneous manifestation itself might not be inappropriate as an introduction to the subject proper. It has been described under various names by different authors, and we may recognize it in the *scarlatinoïde* of Guéniot, the *erythema punctatum* of Crocker and others, the *roséole scarlatiniforme* of Bazin, the *symptomatic erythema* of Hyde, the *scarlet rash* of Murchison, the *diffuse erythema* of Liebermeister, the *erythème infectueux* of Jacquet, etc.

Some writers have given good descriptions, and others have merely afforded an outline sufficient to recognize the condition providing one had a previously acquired knowledge of it. Brocq, in his excellent paper on Desquamative Scarlatiniform Erythema, gives a minute description of this affection in general, and dwells at some length upon the difficulties experienced at times in making a differential diagnosis from scarlatina. Besnier, in an article on the Pathogeny of Erythemas, distinguishes between scarlatiniform erythema and scarlatinoid erythema, although he is free to confess that the objective symptoms differ but little, if at all. The following is a general description of scarlatiniform erythema somewhat abridged from Van Harlingen's description: The disease is ushered in by malaise, lassitude, rigors, etc., which may be severe or slight, and which may last several days. Then a fever sets in, and this reaches its highest point in two or three days. Nausea and anorexia are rarely observed. There is no diarrhoea; sweating is suppressed, or there may be an excessive amount of it. The eruption may come out early. The lesions which appear first consist of very small papules, which soon coalesce and form scarlet patches, sometimes very extensive, and accompanied by itching, burning, and smarting. The eruption may begin at the upper part of the body and travel down to the feet, or *vice versa*; it may also attack several localities simultaneously. The eruption spreads rapidly, sometimes involving the entire body in twenty-four hours. The head and the extremities are usually the last attacked, and the former may entirely escape. When fully developed, the eruption is characterized by an intense and uniform redness, which, however, shows darker shades in places, as the back of the neck and the abdomen. Occasionally œdema is observed or a hæmorrhagic appearance is assumed. In three or four days (in rare cases longer) desquamation sets in. Large, dry, and abundant flakes are shed, the epidermis of the palms and soles being shed *en masse*. The nails and hair are frequently shed. A striking feature of the disease is its tendency to relapses. The first attack is usually the most severe, lasting a month or six weeks. Then, after an interval of several months to several years, there may be a second attack, which is less severe. Successive relapses

may then occur with increasing frequency and decreasing severity until they may even merge into one another.

Such are the salient points of the disease uncomplicated or independent of any other pathological process. It bears a very close resemblance to scarlatina, and some cases have simulated the latter disease so closely as to have called into requisition a high degree of diagnostic acumen in order to determine the true status of affairs. I do not purpose to enter into a consideration of the points involved in the differential diagnosis of the two affections, but will relate some cases of scarlatiniform erythema occurring in the course of typhoid fever, and then briefly consider some of the points which are involved in the question of the pathogeny of the process in the particular instances under consideration, and whether the process can be considered as an absolutely independent one at any time.

CASE I (Personal *).—Annie E., aged ten, had been previously strong and healthy. When four years old she had scarlatina, and when she was six she had the varioloid. About October 17, 1889, she contracted typhoid fever from her mother, the disease declaring itself at the time that the latter was convalescing. The following extracts from the notes of the case are sufficient to briefly outline it :

Oct. 20, 1889. Temperature, 102.5° ; pulse, 100.

Oct. 23. Temperature, 105° ; pulse, 112. Marked red, irregular patches, varying in size from a split pea to the thumb-nail, were observed in the right iliac region. They disappeared on pressure. In addition to this, several small vesicles of pin-head size were observed in the patches.

Oct. 24. Patches of a brighter red color and observable on pubes, upper portion of abdomen, vulva, flexor surfaces of thighs, not below the middle third.

Oct. 25. The eruption has become diffused over the entire abdomen and has extended to the chest, while several patches have appeared on the flexor surfaces of the arms and upon the wrists. The entire flexor surfaces of the thighs and legs are also involved.

Oct. 28. Temperature, 105° ; pulse, 124. The eruption is at its height. The face and scalp are entirely free, and the rash is scanty on the neck. On the extensor surfaces of the limbs it is very scanty or absent, the eruption being separated from the healthy skin by a sharp line of demarkation and disappearing easily under pressure, to reappear as soon as the pressure is removed. The eruption was markedly prominent upon the abdomen and at the flexures of joints. Small cyanotic areas were visible on the abdomen and thighs. The skin of the abdomen was thick, dry, and leathery to quite a degree, not being so much in other parts.

Oct. 29. Desquamation began on the abdomen and progressed rapidly, being completed in five days and progressing in the same order as the erup-

* I am indebted to Dr. W. W. Graves, of St. Louis, for the opportunity of observing this case, and also for his kindness in furnishing the full notes which he made of this interesting case.

tion. The desquamation occurred in large flakes, that of the palms and soles being entire casts. As the desquamation progressed the temperature became lowered, so that on the fourteenth day of the typhoid fever it was 100° , the pulse being 96.

Nov. 2. On this, the sixteenth day, there was a relapse. The temperature rose to 102.5° , pulse 110.

Nov. 3. Temperature, 104° ; pulse, 130. Patches again appeared upon the abdomen.

Nov. 4. Temperature, 105° ; pulse, 140. Rigor; pain in the chest. Capillary bronchitis present. The eruption was spreading to the chest and thighs.

Nov. 5. Temperature, 105.5° ; pulse, 150; respiration costal, 70 to 75. The eruption seemed to be fully developed. It was confined, as before, to the flexor surfaces. It was not as intense as the former eruption, being more faint in color and the skin not so thick and dry. There were also fewer vesicles.

Nov. 6. Temperature, 105.5° ; pulse, 160 to 170; respiration, 70 to 80. Desquamation began on the abdomen; death appeared imminent.

Nov. 10. During the four days since the last record, desquamation was rapidly accomplished. The heart's action grew more feeble from day to day, respiration more embarrassed and feeble, delirium more marked until death from capillary bronchitis supervened.

The autopsy, performed twelve hours after death, confirmed the diagnosis of typhoid fever. The spleen, liver, and kidneys were all enlarged.

CASE II (Case III of Dr. J. W. Moore).—On Sunday, Oct. 7, 1888, he was asked to see a young man of nineteen, at that time on the twentieth day of typhoid fever. The reason for calling him in was the appearance some hours previously of a wide-spread rash, which exactly resembled that of scarlatina. It consisted of minute punctiform, bright-red papules, with a general or confluent efflorescence on the trunk and near the large joints, particularly at their flexure aspect. On Sept. 24th the patient consulted Dr. Pollock, who found his temperature high and sent him to bed. It was soon evident that he was about a week ill of typhoid fever. The disease ran a tolerably normal course until Oct. 6th (the nineteenth day), when an alarming "dip" in the temperature occurred. At 10.30 A. M. a minimum of 96° was recorded, but a recovery took place and at night it was 100.9° . At this time a scarlatiniform rash was rapidly spreading over the chest and back. Considerable desquamation followed the disappearance of the rash. The patient recovered, being convalescent on the thirty-sixth day.

CASES III and IV (Whipham).—On April 13, 1883, Dr. Thomas Whipham reported to the Clinical Society, of London, two cases of enteric fever accompanied by an erythematous eruption resembling that of scarlatina. Both of these cases proved fatal, and the presence of typhoid was confirmed by autopsies.

CASE V (Siredey).—A case of typhoid fever in which, on the fifteenth day, a scarlatiniform erythema appeared, which, commencing in the right cheek, spread rapidly over the face and neck, and by the following day occu-

pied the whole surface of the body. Almost immediately in the groins, the axilla, and on the back, the epidermis was raised by a serous exudation. Desquamation occurred in large flakes.

A number of cases similar to those given above may be found in literature. Dr. John Harley records three cases among others which were most probably scarlatiniform erythema occurring in the course of enteric fever. Dr. Wilks in 1864 made models from cases occurring in two women. The models, which are now in Guy's Hospital Museum, represent the abdomen, forearm, and hand. The rash is of a bright crimson, punctated, macular, and diffuse. Féréal reported a case in 1876 of a young man with symptoms of typhoid fever with a scarlatiniform eruption.

Raynaud and Nélaton observed two cases of typhoid fever, in 1878, which were accompanied by this peculiar rash. Moutard-Martin noticed a case in which a rash, which he called papular erythema, appeared on the sixth day of the disease (typhoid fever). The rash gradually lost its bright color and slowly disappeared. The hands and feet desquamated in large patches, the rest of the body showing only branny desquamation. In one of the patients of Raynaud and Nélaton the eruption appeared on the fifteenth day of the fever, and in the other on the twelfth.

Before entering into a consideration of the pathogeny of this eruption I wish to allude briefly to a few cases which may, in a measure, prove helpful to a proper appreciation of the question. J. C. Wilson states that a diffuse erythematous rash is not infrequently observed in children, and even in adults, with white, delicate skins, during the first week of enteric fever. It is usually marked on the abdomen and flexor surfaces, its usual duration not exceeding three or four days. Dr. Charles W. Allen records a case in which the scarlatiniform erythema was followed by erysipelas about the scalp and face. The rash became confluent upon the back of the neck, sides of the chest, across the lumbar region, over the lower part of the abdomen, and in the popliteal spaces. Upon the arms it was wholly confined to the flexor surfaces, and was but sparsely scattered over the legs, backs of feet, hands, and chest. Upon the chest, just in front of the axillæ, and upon the back and sides of the trunk, there occurred a noticeable mottling or measles-like eruption of bluish macules. These persisted after the erythema had disappeared, and in the subsequent desquamation were the last to lose their epidermis. Croker states that scarlatiniform erythema is observed in septicæmic conditions, and in this he is confirmed by a large number of writers upon surgical topics, who have described the eruption under various appellations; also in empyema; and in the enteric fever of puerperal women. The so-called *erythema puerperarum* which attacks the abdomen, and rarely the face and hands, may be included in this class. Flint states that a scarlet rash occasionally precedes the characteristic roseolar eruption in typhoid.

In making an analytic study of the pathogeny of scarlatiniform erythema as it occurs in typhoid fever, we are confronted with a problem whose difficulties are increased by the fact that the list of detailed cases is a very small one. This precludes, to a great extent, the possibility of deducing certain conclusions such as might be rationally based upon a study of clinical symptoms. What few cases have been reported, however, seem to point to the fact that the first eruption occurs during or about the first week of typhoid fever, and may be followed by a second attack during the third week. This would seem to point to a different origin for each attack—*i. e.*, a vaso-motor disturbance of a reflex character for the first attack, and a toxic origin for the second. Besnier, in his excellent paper on the pathogeny of erythemas, states that in the scarlatiniform erythemas the cause is never an exclusive one. He states that the eruption does not depend upon any particular cause, either internal or external, but upon the subject himself. There must exist a predisposition, or the process will not manifest itself. He has records of cases of the eruption in which it has been apparently produced by widely differing causes, not only in different individuals, but in the same subject. Unfortunately, almost every condition has come into consideration in this analysis except typhoid fever, and it is in this very one that I am inclined to the view that the pathological processes of the disease exert a marked influence upon the production of the eruption. Whether we admit of a predisposition or not, it is, after all, the exciting cause which we are endeavoring to establish, not as it produces its effects remotely, but directly. The fact that the eruption has been observed quite a considerable number of times following operations, inflammatory conditions (non-septic in nature), and other conditions which are more or less material in producing vaso-motor disturbances, would seem to point to this process as a possible cause. Moreover, in so-called idiopathic scarlatiniform erythema a pyretic state is observed to precede the eruption, a fact which would seem to lead to the same conclusion. On the other hand, septic and pyæmic conditions of different origin, as well as auto-intoxications from different causes (rheumatism, alcoholism, etc.), have been accompanied by the same eruption. Taking all of these facts into consideration, I am led to adopt a conclusion formulated by Dr. J. W. Moore—that the scarlatiniform erythema which shows itself at the end of the first week of typhoid fever “probably depends on a reactive inhibition of the vaso-motor system of nerves”; and that the second attack, which is seen in the third week, depends “on septicæmia, or secondary blood poisoning; or both these causes may be present.”

That the pyretic condition exercises some considerable influence upon the production of the rash is shown more particularly in Case I, detailed above. Sudamina were present in addition to the erythema, and we have cases of typhoid fever on record in which miliary rashes have occurred in

addition to the rose-spots. The tropho-neurotic character of the rash also finds support in the fact that urticaria is found to occur occasionally in the course of typhoid. In all of these the production of the eruptions by means of medicinal agents has been carefully eliminated, although the intimate pathological process remains the same, whether the exciting cause be rheumatism, copaiba, gonorrhœa, alcohol, typhoid fever, or mercury. After all, it is the ultimate result upon the skin with which we are concerned. The practical deduction to be derived from the observance of such cases is that we possibly have individuals who, as stated by Besnier, have a predisposition to a certain form of eruption, and in whom any cause which is toxic, or which may in any manner produce inhibition of the vaso-motors, will give rise to an eruption closely resembling scarlatina and which has the tendency of recurring at continually shorter intervals. Besides this, the individual becomes more susceptible to the process. In typhoid fever the presence of the eruption would seem to point to a severe involvement, although not necessarily to a high degree of pyrexia, as, in some cases, the severity was indicated by a marked subnormal temperature. In either case the appearance of the eruption was coincident with the highest or lowest temperature, and at that time when the inhibitory condition of the vaso-motor nerves was most likely to exist.

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LITHOLAPAXY.

NOTES ON THE OPERATION, AFTER-TREATMENT, AND RESULTS, SUGGESTED BY THE EXPERIENCE OF MY FIRST FIFTY CASES.

BY GEORGE CHISMORE, M. D.,
San Francisco, Cal.

ON the 10th of November, 1880, I made my first litholapaxy, following as closely as possible the method of Prof. Bigelow, and using his instruments.

A large oxalate was encountered, and in the end entirely removed, the patient remaining free from stone to the present time. The case was reported in full in the Western Lancet for March, 1881, and was the first of

the kind recorded on the Pacific coast. The difficulty had in passing the evacuating tubes, on account of the tissues of the deep urethra crowding into the large eyes, led me to have obturators fitted to the catheters. It is my belief that the use of tubes thus improved has tended to diminish the risk in my subsequent operations.

My fiftieth operation was made March 26, 1890. The whole number may be summarized as follows: Age of youngest, thirty-six; oldest, seventy-six; average, fifty-seven years and a half. Twenty-four calculi were oxalates, twenty-one phosphates, three mixed oxalates and phosphates, one uric acid, and one of unknown composition. The weight of the smallest was eleven grains; the largest, one thousand grains; average weight, one hundred and thirty-four grains. The time in operating was ten minutes in the shortest, one hundred and sixty minutes in the longest, and fifty-four minutes in the average case. Ether was given in twenty-five, cocaine in eighteen, and no anæsthetic used in seven cases. Cocaine was used for the first time December 6, 1884, in my twenty-first case, and thereafter in all but three of the remaining cases where an anæsthetic was required.

The method pursued was, after washing the bladder, to inject from half an ounce to an ounce of a four-per-cent. solution of the muriate of cocaine, wait until the sensation was gone or greatly diminished, and then proceed, using a strong solution of boric acid in the aspirator and adding more cocaine as needed during the operation.

It is well to remember that the muriate of cocaine is at once precipitated by a solution of borax, but is not affected by admixture with a solution of boric acid.

In several cases there was marked disturbance from the cocaine nausea, pallor, perspiration, and tendency to syncope, but in none did the toxic effect occur to the extent of interrupting the operation. The degree of anæsthesia varied from perfect insensibility (in one case, while crushing and aspirating a large oxalate, the patient read a paper and laughed so heartily at some humorous anecdote that I was obliged to check him) to only a moderate lessening of the suffering. The cases where toxic symptoms appeared were not marked by a greater degree of local insensibility.

My twenty-first case was also the first in which my combined crushing and evacuating lithotrite was used.

In the last thirty cases of those included in this report this instrument was used with Bigelow's six times, alone twenty-two times. In two cases—one a uric-acid stone, the other a very hard oxalate—it failed absolutely, and the operations were made with Bigelow's lithotrite and Otis's aspirator. It was presented to the profession at the meeting of the California State Medical Society in April, 1886, and it has been found of such use, in my hands, as to justify a quotation from the proceedings of the society for that year describing the instrument:

“While the removal of the last piece in litholapaxy is of the utmost importance, it is at the same time the most difficult and dangerous part of Bigelow's operation. To consider the causes that lead to this difficulty, and to suggest a means whereby the danger can be lessened or avoided, is the purpose of this paper.

“When a stone has been crushed, the fragments almost invariably gravitate to the most dependent part of the bladder—the posterior inferior region—and here, in the usual method of operating, they must be sought. Now, this portion of the organ is surrounded by the pelvic wall in such proximity that, when the beak of the lithotrite is lateralized 45° or more, the points of the blades may be readily brought in contact with the bones, only separated by the coats of the bladder and a thin layer of soft tissues; under these conditions, when closing the instrument in search of pieces, the ends of the jaws gliding over the smooth bony walls, any inequalities in the thickness of the viscus or local restriction of its mobility tends to form folds in its inner surface that crowd into the bite. When no fragment is caught, the sense of touch will warn the operator that he has grasped the soft parts; but when a piece of considerable size is included with a fold, it is very easy to inflict serious damage.

“If we examine the bladder in this region we will find, internally, the well-known ridges extending from the vesicular orifice of the urethra to the mouths of the ureters, and can feel apparent inequalities in the walls due to the cord-like bodies of the vesiculæ seminales and vasa deferentia, which lie externally and form the lateral boundaries of the trigone. The recto-vesical fold crosses from near the orifice of one ureter to the other, and restricts somewhat the mobility of that part of the viscus along the line of its course, and the lateral ligaments do the same, in a lesser degree, for the tracts to which they are attached.

“When it is remembered that, in the tedious groping for an elusive piece, this dangerous locality must be swept over again and again with the jaws of the lithotrite, it will be admitted that, if this part of the operation can be avoided, the mortality should be diminished. Through the kindness of Dr. C. E. Farnum, Demonstrator of Anatomy, Cooper Medical College, an opportunity was afforded the author to thoroughly verify the foregoing observations. With the assistance of Dr. H. M. Sherman, a series of experiments was made on the bladders of six subjects, who had died at ages varying from thirty to sixty years. The plan pursued was as follows: In each case repeated trials were made with the lithotrite to pick up the whole or part of the bladder walls, varying the amount of fluid injected into the viscus from four to sixteen ounces. When a fold was caught it was strongly pinched, so as to leave a mark for subsequent examination. There was a marked difference in different subjects as to the ease with which the entire thickness of the bladder could be grasped, de-

pending apparently on the varying degree of tension exerted by the vesico-rectal fold and the lateral ligaments; in all cases it was extremely easy to pinch the mucous coat.

"The bladders were then opened at the apex, the injured parts scanned, and the experiments repeated, observing the action of the instrument through the incisions. The points liable to the greatest injury were along the line of the margin of the vesico-rectal fold, near the mouth of the ureter on each side, and over the vesiculæ seminales and vasa deferentia, but the mucosa could be seized in any portion of the fundus.

"The conclusions reached were: That it is almost, if not quite, impossible to perform lithotrity in the usual manner without pinching the mucous coat and endangering the deeper structures, and that doubtless a portion of the fatal cases are due to this cause.

"Another source of danger is found in the violence inflicted on the deep urethra and its surrounding parts by the repeated insertion and removal of such large instruments as are needed in the ordinary methods of procedure in litholapaxy.

"Although great improvement has been made by Professor F. N. Otis, of New York, in the shape of the catheters, still any one who has had a practical experience of the operation can easily appreciate the amount of risk and danger due to this cause alone. We all know how resentful the membranous and prostatic urethra is at times, and anything that tends to simplify the operation in this respect will be recognized as a step in the right direction.

"I take pleasure in presenting to the profession through this society an instrument which I have devised, by the use of which it is hoped that a considerable part of the difficulties and dangers described may be avoided. It will be perceived that it is a lithotrite and evacuating tube combined, and so made as to be readily connected with Bigelow's, Otis's, Sir Henry Thompson's, or any other form of aspirator.

"The screw power and lock usually found on lithotrites has been omitted, as it is not intended for use in the beginning of operations on stones of considerable size or unusual hardness; in such cases the first crushing and aspiration should be made with the ordinary instruments; after this it will be found that the hands of the operator are quite powerful enough to crush even large fragments without difficulty." Another reason for dispensing with the screw power and lock is that, if too strongly applied, it might cause the jaws to break or spread, as the metal in the shafts is necessarily thin. The former accident would make some form of lithotomy needful; the latter, a suprapubic section imperative. "For small and soft stones no other instrument should be required. No credit for the principle—a combined crusher and evacuator—is claimed. There have been many instruments—some more than twenty years ago—put forth based on

this idea ; but it is believed that the one now brought before you is an improvement on its predecessors in the following particulars—viz. :

“ 1. A larger caliber of the catheter, circular in form, consequently admitting the freer passage of fragments.

“ 2. Merit as a searcher in cases of stones that evade detection by the usual methods of exploration.

“ 3. Simplicity of construction, and the ease with which it can be taken apart to clean—an important point in instruments designed for use in lithotripsy.

“ 4. Enabling the operator to proceed, after the first crushing and aspiration, uninterruptedly with the operation, without the necessity of the repeated introduction and removal of different instruments, thus diminishing the danger of injury to the deep urethra and lessening the time required.

“ 5. Enabling the operator to avoid working with the beak reversed, thus avoiding the most dangerous region—the fundus of the bladder—the only part where it can be easily grasped by the lithotrite.”

The method of using the instrument is as follows : The male blade is removed and well soaped with Packer's tar soap, to make the joint between the inner and outer tubes air-tight. It is then replaced, the surplus soap wiped off, and properly lubricated. After entering the bladder, the jaws are opened, an Otis or other aspirator coupled on, and a gentle aspiration made.

On closing the jaws, the stone or fragment will usually be caught ; the cock is then closed, the aspirator detached, and the piece crushed, holding the female blade very firmly with the left hand, while the male blade is forced home with the right. When no more fragments are easily caught, the aspirator is coupled on again, the *débris* removed, and the process repeated until the operation is finished. I have recently made an alteration in the coupling socket of Otis's aspirator by lining it with rubber such as is used in the joints of the Alpha syringe. This facilitates the search of the *bas-fond* with the lithotrite reversed should that be needed. It also enables me to use quite an assortment of tubes that would not fit closely enough in metallic or hard-rubber sockets.

I find that air enters the bladder to a considerable extent during prolonged aspiration, sometimes giving rise to expulsive spasm. The operator should empty the viscus several times during the operation to avoid overdistention.

I take advantage of such occasions to inject a fresh supply of cocaine through the instrument. *I do not find the entrance of the air* to be a serious objection, although I am aware that it has been held to be so.

In regard to after-treatment, the main point impressed upon me is to insist on several days of rest, even if the patient declares himself free from

all distress and perfectly well. This is particularly important in cases where there is an enlarged prostate and where the evils of overdistention and retention and cystitis have damaged the renal structures. Several of the cases observed caused much suffering from disregarding directions in this matter. The only one of the series that died within six weeks of the operation lost his life by his imprudence in getting up and exposing himself to cold, causing a fatal attack of pyelitis, post-mortem showing the kidneys riddled with abscesses, the bladder free of stone and uninjured.

Results.—These fifty cases comprise all cases of stone that have come under my care since the date of the first, with the exception of one child of eight years, whom I cut for a large urate, two of suprapubic cystotomy, and seventeen small calculi, which were removed with the evacuating tube without crushing.

In none has the operation resulted fatally. In only one, before referred to, has death taken place within five months after the removal of the stone. The degree of relief afforded by the operation, the liability of recurrence, and the difficulty of completely removing the stone at a sitting, depend greatly on the condition of the prostate. Where there is much enlargement and where the catheter is required, the relief, though great, will be but partial. Another stone is very liable to form, and the "last piece" may need several trials to remove.

It has happened several times to me to have a fragment of considerable size disappear entirely during an operation. For a long time its lurking place remained a mystery, but two of my failures have furnished an explanation. They are reported in the hope that they may aid others in similar cases.

In July last year a clergyman about sixty years of age presented himself at my office, and, on sounding his bladder, I readily detected a stone. The case seemed very simple. He had been cut by a celebrated surgeon a year previous and a stone removed by lateral lithotomy, but without relief. (He did not tell me at the time the surgeon did not get the stone until three days after the operation.)

A few days later I attempted a litholapaxy. I could touch the stone with great ease, but always with a fold of the bladder (as I thought) between the jaws and the calculus. After a prolonged trial I was forced to give up, beaten, and sent him back to bed.

A few days later I made a median incision through the perinæum, and with much difficulty seized and removed a thin oval calculus weighing twenty-four grains. With the hope of releasing him from the catheter, I made a backward cut through the prostate, put in a large tube, and kept it there six weeks. It was removed and cleaned daily, *and was found to enter seven inches before the bladder was emptied.* The bladder was

searched through the wound at the time of the operation and was thought to be free of stone.

After the removal of the perineal tube the old tenesmus recurred. He could not void a drop of water without the catheter, and his condition was as bad as before. On March 11, 1890, I made suprapubic section. On getting the finger into the bladder, a *soft* fleshy mass, with the urethra opening near its center, projected at least two inches into the organ. In front and a little to the left of the symphysis in the deep sulcus between the mass and the bladder were two thin oval oxalates weighing, respectively, forty-eight and fifty-six grains.

The wound was treated by the open method; he made a good recovery, and is now free from distress and uses the catheter only three times daily.

In December last a farmer aged seventy, from whom I had previously removed a large calculus by litholapaxy and several small ones after attacks of nephritic colic, again presented himself with symptoms of stone. So great was his suffering from "spasm of the bladder" that in his haste to introduce the catheter he had perforated the urethra, and there was extravasation of urine and several perineal fistulae. I made section in the median line, and with a small pair of forceps with much difficulty seized a stone. This was found firmly encysted near the symphysis. After a good deal of force it was dislodged, and, on bringing it to the incision, the hold was found to be a faulty one, and it was dropped to secure a better. Find it afterward I could not, and, after a prolonged attempt, his condition from the ether became alarming and I gave it up, inserted a large drainage-tube, and put him to bed. *The prostate was enlarged to such an extent that the tube entered seven inches and a half before the urine began to flow.* A week afterward I made the high operation. The finger readily found the pocket where the stone had been, but the bladder seemed to be quite empty. A mass as large as a small orange projected into the bladder from below. It was irregularly rounded, very firm to the touch, and near its center the drainage-tube was felt in place. Searching about with the finger, the mass was found slightly movable, and finally, with considerable force, was pushed forward. The finger then found its way into a deep sulcus behind, and there lay the stone nicely pocketed by my efforts to seize it in the previous operation. It was irregular in shape, $1 \times 1\frac{3}{4} \times 2\frac{1}{2}$ c. c. in size, weighed forty grains, and was a pure oxalate. He also made a good recovery, but still has to use the catheter.

These cases seem to clearly explain the manner in which a large fragment may be lodged during a litholapaxy and for the time being elude any form of lithotrite. They also throw much light on the cystitis which has been found to follow Bigelow's operation in a certain number of cases. One will not be far wrong if he takes the view that cystitis following

a litholapaxy is simply evidence of a piece of stone remaining in the bladder.

As a whole, the operation is a most satisfactory one. Where the patient is able to void his urine and the prostate is normal, complete cure is possible with a very small amount of risk. In the cases of enlarged prostate after catheter life is begun, great relief is possible, and all the stone may be removed with patience in almost all cases. The danger is greater, of course, but still far less, than that from lithotomy. Of my fifty cases, in twelve the prostate was normal, enlarged in thirty-eight, and the catheter was used habitually in twenty-eight.

920 MARKET STREET.

Society Transactions.

AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

FOURTH ANNUAL MEETING, ALTOONA, PA., JUNE 3 AND 4, 1890.

JOHN P. BRYSON, *President, in the Chair.*

SECOND DAY.—*Wednesday, June 4th.—Morning Session.*

(Continued from page 272.)

A Case of Suprapubic Lithotomy and Prostatectomy.—By DR. J. WILLIAM WHITE, of Philadelphia.

J. S., aged sixty-eight; family history of tuberculosis; always a moderate drinker; recently intemperate; urinary symptoms six years; catheter required at intervals for eight years. For four years unable to urinate without catheterization. Progressively increasing pain in hypogastrium, now (1889) excruciating, and felt also at end of penis and in rectum. Has lost much flesh; chronic bronchial cough. Eats and sleeps poorly. Urine scanty, loaded with pus and vesical debris; contains hyaline and granular casts. Physical examination *per rectum*: enlarged prostate both laterally and longitudinally, the finger being unable to reach its upper limit. Bladder contains a soft phosphatic stone of medium size. Mitral murmur; bronchial catarrh; beginning consolidation at left apex. Operation, Dec. 11, 1889: Linear incision two and a half inches long in linea alba just above the pubes. Stone crumbled under the touch of forceps and was removed by the finger and a scoop. The major portion of the projecting prostate removed by enucleation with the finger. Large drainage-tube inserted into bladder and held in place. Outlook most favorable for three days. On the fourth, maniacal delirium, excessive restlessness, wakefulness, jactitation, etc.; refused food, tore off dressings, and had to be kept in bed by force. Tongue became dry and dark; pulse increased in frequency; no chill, sweating, or rise of temperature. Urine continued to flow through the wound, which was

irrigated daily with boric acid, listerine, or pherol sodique. Patient passed into state of stupor and died seven and a half days after operation. Autopsy: Ureters distended to nearly the size of wrist; kidneys almost completely disorganized, containing multiple purulent collections, showing scars of previous abscesses and rendered almost useless by chronic nephritis. Tubercular changes in lungs.

Dr. White stated that, in view of the kidney disease, probably he should have been content with suprapubic lithotomy; that possibly the use of chloroform would have been better in this case; also that after he had decided upon prostatectomy a less thorough operation might have been advisable.

Notes on the Technique of Suprapubic Cystotomy and Prostatectomy.*—

By DR. W. T. BELFIELD, of Chicago.

A New Means to assist in the Removal of Intravesical Growths through a Suprapubic Cystotomy.—By DR. FRANCIS S. WATSON, of Boston.

Under this title Dr. Watson demonstrated the mechanism and method of use of two instruments devised by himself, their objects being, respectively, to expose the interior of the bladder, after the organ had been opened by the high cut, to view, and to remove bladder growths by means of galvano-cautery action.

These ends were accomplished by a bladder speculum and a galvano-cautery instrument. (Detailed description reserved for future publication.)

The essential features of the speculum are: 1. That its blades are widely fenestrated. 2. It is capable of being readily inserted into the bladder through the ordinary wound made in opening the organ, and thereafter of being expanded so as to distend the bladder, at the same time spreading the outer wound in such a way as to give, with the electric lamp, as the latter is usually employed (to illuminate), a perfectly clear view of the inner surface of the bladder, and to render it easy of access to operative manipulations. 3. The instrument is made in one piece, and is entirely under the control of one hand of the operator. 4. When its blades are expanded, the edges of the bladder wound fit closely about the abrupt shoulders of its blades, and the bladder can thus be raised at will by the operator.

This speculum, the reader stated, supplied the place and obviated the objections of all the means now in vogue to expose the interior of the bladder to view and to instrumental manœuvres.

The reader mentioned his objections to the present technique in this regard as follows:

The postural method of Trendelenburg was clumsy. The use of two or three spatulæ or écarteurs required a corresponding number of hands to maintain them in position, which were in the way of the operator. The same was true of tenacula, or threads. Solid-bladed spatulæ were undesirable, because they covered a portion of the interior of the bladder and interfered with the use of instruments in the removal of the growths.

The reader noted one limitation to the use of his speculum, which was that, should a bladder growth be of such an exceptional size as to nearly fill

* Will be published in this Journal.

the organ, and have also a tough and very wide base, the blades of the instrument could not be properly expanded.

Dr. Watson next showed his second device—the galvano-cautery, the especial feature of which was that its form was such as to allow of its blades being applied readily to all parts of the inner surface of the bladder.

Removal of the Third Lobe of the Prostate, with Complete Restoration of the Functions of the Bladder.*—This paper, by DR. F. N. OTIS, of New York, was read by DR. W. K. OTIS.

DR. H. G. MUDD showed a **Fibro-myoma of the Prostate** which appeared at the age of twenty-eight. The tumor measured seventeen inches in circumference.

DR. J. P. BRYSON presented two specimens of **Outgrowths of the Prostate removed by Suprapubic Section.**

The preceding papers were discussed together.

Discussion.

DR. J. W. WHITE said with reference to the use of the rectal bag that, unless the danger was greater than shown in the past, he felt inclined to continue its use. It gave a firm support behind and made easier the recognition of small growths. The only disadvantage he had noticed was that during the presence of the bag in the rectum one was apt to have continued oozing from the large veins in the prevesical space. This ceased, however, as soon as the bag was withdrawn and the rectum allowed to collapse. The dangers were familiar. He believed some of the risks would be diminished by using a cylindrically elongated bag.

DR. POST thought that Dr. White's summary at the close of his paper expressed his opinions very well—namely, that it was very difficult to know exactly in what cases of prostatic enlargement a portion of the prostate might be removed to give relief. There were a number of cases in which we must be satisfied with drainage by an artificial opening either in the perinaeum or pubes, and there must be a pretty large number of cases in which it was impossible to isolate a distinct growth which could be removed as such. How much to remove in those cases of concentric hypertrophy or where it was impossible to make out a distinct lobe he felt uncertain, and it seemed to him it must require considerable experience yet to know exactly what course to pursue in such cases. He felt that it was yet uncertain how much advantage was to be gained by suprapubic drainage.

DR. W. K. OTIS said that perhaps a better way of operating in suprapubic cystotomy was not to fill the bladder until after the wound had been made down to the bladder in order to obviate any danger of bursting the bladder from the patient's movements while being etherized. Where there was a very small bladder that held only five or six ounces it seemed to him better to open it on a sound.

DR. BANGS said he had become conservative with regard to the performance of prostatectomy. In some cases in which he had done suprapubic lithotomy and found a very seriously obstructing prostate which could be

* Will be published in this Journal.

easily removed and without much danger to the patient, he had refrained because he had observed that after the removal of a stone from a bladder which previously had been unable to spontaneously evacuate its contents the bladder had recovered its function so that the amount of residuum became slight and the urine was perfectly clear and limpid. He thought elevation of the bladder by means of a moderately distended bag in the rectum did facilitate some steps in the operation, and in old men especially, where celerity of operation was very important. He had never found any especial advantage in draining the so-called prevesical space.

DR. CABOT thought there was not great danger from the rectal bag when it was used with care. There was this advantage in using it: that it brought into view the posterior wall of the bladder, where most of the tumors and morbid conditions were, and made much manipulation unnecessary. He thought the pear-shaped bag placed low in the rectum lifted the bladder up out of the pelvis better than the sausage-shaped bag.

DR. BRYSON said that in regard to the influence of the general health on the result he thought it was that upon which we must rely for our results in these cases, and that in prostatic patients the general health would be determined mainly by the condition of the kidneys. Old men with alcoholic history who were passing a large quantity of urine with low specific gravity were unfavorable subjects for operation. Suprapubic cystotomy in the young and vigorous was not, in his experience, attended with bad results. Heart failure he had learned to fear more than anything else in these cases. He thought the observations of Dr. Belfield in regard to the effect upon the arterial pressure of irritations about the rectum, vagina, etc., were of the highest importance. He cited a fatal case of heart failure in his practice following a suprapubic cystotomy in a man of seventy years.

DR. BELFIELD said that, as to the rectal bag, he meant that in the typical suprapubic cystotomy the bag was unnecessary and should be omitted. There were cases in which the base of the bladder should be raised, and in those the bag was desirable. His conviction was that the advantage of suprapubic drainage, according to the method described by him, over what we used to call perineal drainage was enormous. Inasmuch as the cause of the condition was to be found in enlargement of the prostate, in his judgment it would be better to remove that cause, particularly as, in the ordinary case, it would not add materially to the danger of the operation, and might prevent the return of the condition for which the operation was done. Unquestionably the condition of weakness to which Dr. Bryson had referred was the factor chiefly to be feared. He, however, had seen fatal peritonitis follow suprapubic cystotomy for stone in the hands of a surgeon of national reputation. The operator was not conscious of having injured the peritonæum. In another case, by the same operator, fatal tetanus had occurred within forty-eight hours.

DR. F. S. WATSON said that statistics showed that the palliative operations were quite as dangerous as the radical ones, and when one had opened the bladder he might just as well go on and take out the growth, unless the case presented some peculiar difficulty, such as extreme exhaustion, in which event one would secure drainage and subsequently complete the operation.

He was in accord with what Dr. Bryson had said in regard to the specific gravity of the urine. He did not quite agree with Dr. Belfield in regard to the question of lifting up the prevesical fat instead of carefully dividing it and going down to the bladder in that way. He thought the less that space was disturbed the better. He thought injection of both the rectum and the bladder, where it could be done, was better than injection of the bladder alone.

A Case of Congenital Malformation of the Urethra was the title of a paper by DR. A. W. STEIN, of New York, read, in the writer's absence, by DR. R. W. TAYLOR.

The malformation in this case was, so far as Dr. Stein knew, unique. It consisted of an abrupt diminution of the canal about an inch anterior to the membranous portion of the urethra. Urethra of normal caliber—33 F.—in front of the diaphragmatic obstruction; but here the mucous membrane was folded upon itself toward the lumen of the canal, and the urethra was reduced to about fifteen millimetres in circumference, and remained uniformly diminished to the vesical orifice, a distance of about three inches. As there was frequent micturition and a history of gonorrhœa, stricture was suspected. In exploring the urethra, the urethrotome was first used, then the *bougie à boule*, and subsequently smaller instruments. All met decided obstruction about five inches from the meatus, giving the impression that a very narrow stricture existed. Internal operations were abandoned and external perineal urethrotomy, without a guide, contemplated. He was suffering from phthisis pulmonalis, and operative interference was deferred until he should become stronger. He died from asthenia in a few days. There was concentric hypertrophy of the walls of the bladder until its cavity was diminished to a capacity of about two ounces.

Afternoon Session.

Notes on the Operation, After-treatment, and Results of Litholapaxy*—by DR. G. CHISMORE, of San Francisco—was read by the Secretary, DR. CABOT, in the writer's absence.

Memorandum in a Rare Complication of Litholapaxy.—By DR. J. WILLIAM WHITE, of Philadelphia.

Patient aged forty; weight, 270 pounds; frequent urination sometimes, occasionally sudden stoppage of stream in the act. Examination: Small stone in the bladder; moderately enlarged prostate; contracted meatus; hyperæsthetic urethra; granular and hyaline casts in urine. Patient etherized, bladder washed out, four or five ounces of boric-acid solution left in. Lithotrite easily introduced. The stone, which was not over half an inch in diameter, caught, broken, and two of the fragments seized and further broken. On withdrawing the lithotrite, a gush of fluid followed the instrument. Attempting to insert a small evacuating tube, it was arrested at the prostate and would pass no farther. All the instruments tried likewise failed. Forced injections of oil, urethral forceps, etc., were tried perseveringly. A large blunt instrument was used in the effort of forcing this supposed fragment back into the bladder, but without avail. Finally a small Nélaton

* See page 300.

catheter passed into the bladder. For a few days considerable difficulty in urination ; smallness, deviation of stream, and much tenesmus. On the fourth day, while straining, he ejected a uric-acid stone, after which urination was much easier and symptoms disappeared. Lithotrite again introduced and a small fragment crushed. Patient in a few days returned home.

Discussion.

DR. W. K. OTIS thought it a mistake to operate with cocaine. Bladders which had held a stone some time were exceedingly tender, and the continual straining of the patient in the effort to expel the contents of the bladder made it difficult to operate. While cocaine dulled the sensation in the urethra, it did not dull the sensation in the bladder very much, because the bladder was not very absorptive. With the present form of evacuator there was no necessity of getting air in the bladder. He had used Dr. Chismore's instrument once with success for a last fragment, but the current produced by that instrument was not very strong on account of the small caliber of the tube. He had seen fragments lodge in the urethra several times, but they had always been successfully removed.

DR. CABOT called attention to the number of oxalate stones that Dr. Chismore had had, there being but one uric-acid stone in his list, but many oxalates. In something over fifty cases Dr. Cabot had had only a few oxalate stones, but a much larger proportion of uric-acid stones.

He had found that, when a pocket behind the prostate made a stone or last fragment hard to seize, by raising the hips so as to roll the stone back from the prostate to the fundus of the bladder, one could often easily reach a stone which before was inaccessible.

DR. BRYSON said, in regard to the detection of the last fragment, he was surprised that no mention had been made of the use of the cystoscope. He would not hesitate to use it in a case where he was in doubt. He thought by the use of it a good deal could be told about the pockets in the bladder unless there was considerable bleeding. Most of the bleeding, he thought, came from the vesicle neck. Dr. Bryson mentioned an experience similar to the one Dr. White had had. Having made a diagnosis of multiple calculus in a case, he was proceeding to do litholapaxy. On introducing the instrument, he found that one of the calculi had come down since his last examination and become impacted in the prostatomembranous part. Failing with instruments to get this back, he made a median incision and removed the impacted stone, which had two facets. On carefully searching the bladder, only one stone was found. Its situation and relation to the bladder-wall indicated the reason of the formation of the two facets. It was attached to the roof of the bladder toward the fundus to a trabecula and hung like a clapper in a bell; accordingly, when the bladder emptied itself, this came down, sometimes on one side, sometimes on the other side of the stone at the base of the bladder, and so made two facets upon it. Where he lived the stones were, almost without exception, secondary calculi, and the calculi were very largely phosphatic. He had oftentimes been embarrassed in the removal of fragments with any apparatus, owing to the thickness and toughness of the mucus in which these fragments of secondary calculi were often imbedded. A mixture

of bicarbonate of sodium would dissolve the mucus better than anything else he knew of, and he accordingly used a solution of this in washing them out.

A Case of Cyst of the Kidney apparently cured by a Single Aspiration.*
—By DR. A. T. CABOT, of Boston.

DR. J. W. WHITE was not aware that authorities were so positively in favor of nephrectomy under such circumstances. It never would have occurred to him in a single case of hydronephrosis, or simple cyst of the kidney, to do nephrectomy without first trying the effects of nephrotomy. Statistics showed that nephrectomies after nephrotomies were less fatal than primary nephrectomies.

DR. BRYSON agreed with Dr. White that it would not occur to him to do a nephrectomy first under such circumstances. He thought that in every case there was ample time for drainage. He did not think the danger to the general health was sufficiently severe to warrant measures being taken in haste.

Peripheral Neuritis of Syphilitic Origin.*—By DR. J. A. FORDYCE, of New York.

A Contribution to the Study of Multiple Neuritis of Syphilitic Origin.—DR. R. W. TAYLOR, of New York, read a paper with this title, embodying the reports of two cases of involvement of the spinal nerves during the course of syphilis. His first patient was a female, aged forty, born in Norway, who came to America about twenty-five years ago, and has no recollection of having come in contact with lepers in her native country. She was first seen in 1882, when she gave a history of syphilitic infection eight years previously, though her condition indicated a much more recent infection. Her child, aged two months, was in the active period of hereditary syphilis. In June, 1882, she had a typical syphilitic iritis, with the copper-colored spots of a vanished eruption, and nocturnal pains. In the latter half of the second year of her syphilis marked analgesia and anæsthesia were present over the backs of the fingers, hands, and wrists; at the same time she had pains in her eyes and dimness of vision, and the ophthalmoscope revealed double neuroretinitis.

The eye trouble disappeared under specific remedies, but the analgesia extended slowly up the arms to the elbows, being complete on the extensor surfaces about Christmas, 1882. Early in 1883 diffuse gummatous infiltration was noted in both cheeks, with tender spots of periostitis over the cranium, and severe headache. At the end of 1883 the sensory disturbances had extended to the shoulders, being complete on the extensor surfaces and partial on the flexor. It was noted at this time that, owing to the loss of sensation, she injured her hands in many ways. Numbness in the feet and toes also appeared about this time, which, by January, 1884, had extended on the anterior and outer aspects nearly to Poupart's ligament. In the summer of 1884 degenerative changes began in the fingers, subsequently in the toes, owing to various traumatism to which her anæsthetic condition exposed her. Indolent ulcers appeared which showed no tendency to heal, but which caused all the tissues to disappear by molecular necrosis, surgical interven-

* Will be published in this Journal.

tion being sometimes required to obtain serviceable stumps. The destruction of numerous phalanges of the fingers and toes, and the contracted appearance of the members, were illustrated by accompanying photographs.

Another case reported by the writer was that of a man, aged thirty-six, who developed a severe sciatica six months after infection, necessitating him to take to his bed. At the same time he complained of pain in the parts supplied by the anterior cutaneous nerve of the same side. On examination, a number of not well-circumscribed masses of gummatous infiltration on inner surface and calf of the same leg. Under the use of the iodides internally, combined with mercurial and belladonna ointment externally, the gummata disappeared, together with the neuralgic pain.

Synchronously with the neuritic phenomena, typical dry onychia and separation of the nails began on several fingers of both hands and on several toes of both feet.

DR. TAYLOR reviewed the case, reported by Kaposi, of the occurrence of syphilis and leprosy in the same patient, and concluded that there was no good ground for assuming the presence of the two diseases; the nervous phenomena in this case, in the light of the case which he reported, being better explained on the hypothesis of a syphilitic neuritis.

DR. A. POST said that Dr. Taylor's last remark in regard to the evanescence of the analgesia brought to his mind a case of his in which a gentleman, who had had syphilis of some ten years' duration, had on one thigh an analgesic spot which had existed since a very early period in the disease, and had not changed from the first. There certainly could be no hysteria in that case.

DR. J. W. WHITE said the papers by Dr. Fordyce and Dr. Taylor had thrown light on some cases in his own practice the last year or two. These patients were under his care for constitutional syphilis, and his belief in the existence of neuritis was so slight that he sought for other causes of pain. He thought the probability was strongly in favor of Dr. Taylor's theory.

DR. R. W. TAYLOR said there was one point he had not elaborated as yet—namely, that frictions of mercurial ointment caused subsidence of the swellings and disappearance of the pain. He thought the affection might be summed up in this way: that it was a simple inflammatory process taking place in the connective tissue of the nerve, irritating that and causing pain, and sometimes by implication and pressure, leading to the degeneration of the nerve.

Diphtheria of the Meatus Urinarius.*—By DR. F. TILDEN BROWN, of New York.

Discussion.

DR. TAYLOR said he supposed, in the absence of a better name and in the light of the microscopical results, we should call it a case of diphtheria of the glans. He had seen many such cases following circumcision, particularly in those who lived in squalor and poverty; the glans penis was attacked with redness of an exudative character, and was promptly covered over with this dirty-colored membrane, which, in its first stages, had the appearance of tal-

* See page 289.

low. As that increased, it dried into this tough, brownish-white membrane. He had seen the same diphtheritic condition on the healing surface of chancre.

DR. POST thought the evidence in this case was pretty strong in favor of diphtheria.

DR. BRYSON thought the diagnosis of Dr. Brown was the correct one.

A Case of Exstrophy of the Bladder (with Photographs).—By DR. A. T. CABOT, of Boston.

The patient was a boy of five, well nourished ; congenital exstrophy of the bladder and epispadias. Defect in anterior abdominal wall, perhaps three fourths of an inch in diameter, and, as usual, the whole upper wall of urethra wanting. Abdominal wall lax. Decided to operate by paring the skin at a short distance around the defect and then bring it together with sutures so that the under surface of the fold thus formed should be the anterior wall of the bladder. Operation, July, 1889. The epithelial covering of the surface immediately around the opening was very thin and closely attached to the tissues beneath. A line about half an inch wide was denuded at a sufficient distance from the edge of where the tissues were lax, and could slide easily on the underlying parts. The only place where there was any difficulty in bringing the sides together was at the upper angle, where there was considerable scar-like tissue, the remains of the umbilical scar. This upper portion, which came together hard, failed of union, but all of the lower part healed by first intention and formed a bridge over the opening in the abdominal wall, which prevented any considerable prolapse of the bladder mucous membrane. The opening between this bridge and the upper surface of the penis was so close that the escape of urine was much interfered with, and, in consequence, a considerable hydronephrosis formed ; during this time the boy became very weak and pale, and the amount of urine was considerably diminished. October 22d, second operation for providing a more free escape of urine. Body of penis removed. Mucous membrane of urethra dissected off and united to prepuce. Urine escaped much more freely. Boy rapidly recovered.

A Method of employing Antisepsis in Recent Anterior Urethritis was the title of the last paper, read by DR. J. W. WHITE, of Philadelphia. His conclusions are as follows : 1. The microscopical and experimental evidence in favor of the bacterial origin of gonorrhœa is confirmed by clinical and therapeutical experience. 2. The results of antiseptic treatment have not been so uniformly successful as would be expected, on account of (*a*) the anatomical and physiological peculiarities of the male urethra, (*b*) the difficulty of applying sufficiently energetic local antisepsis, (*c*) the necessarily intermittent character of such applications, and (*d*) the failure to combine with the topical treatment appropriate internal medication. 3. No one antiseptic agent can be depended upon, in the strength at which it can be borne by the inflamed urethral mucous membrane, completely to sterilize the discharges and the suppurating surfaces. A judicious combination of several antisepsics, if not essential to success, is at least of considerable value. 4. The internal administration of salol in conjunction with copaiba and cubebs renders the urine aseptic and probably antiseptic, so that it acts as an exceptionally

thorough and efficient antiseptic injection, shortening the duration of the disease and diminishing the frequency and severity of the complications. 5. The production of urinary sepsis by internal medication is of considerable value not only in the inflammatory affections of the genito-urinary tract, but in the preparation of the patient for operation upon those organs and in the after-treatment.

Discussion.

DR. R. W. TAYLOR did not deny that gonorrhœa might be the result of the gonococcus, but there was no proof of it other than the case of Bumm's. The micro-organism theory was elusive in practice. He had found no good at all from retro-injections or from injections of bichloride of mercury in gonorrhœa. He did not think one could draw definite conclusions as to the efficacy of salol in this disease so long as it was used in combination with other drugs like cubebs and copaiba. Time was also a very important element in testing a drug.

DR. BELFIELD thought Dr. White had taken a very rational position in the matter. In estimating the value of any drug in the treatment of gonorrhœa we must bear in mind that the disease was often very closely simulated by something which was not gonorrhœa. A man who had had gonorrhœa might have an outbreak which closely resembled the genuine outbreak, and the clinical course of this would be much more favorable, whatever the therapeutics employed, than in case of a fresh infection of a virgin urethra. He believed gonorrhœa to be a parasitic disease, yet all the remedies which destroyed parasites had been unavailing in his hands, and he employed the purely empirical treatment of hydrastis locally and an alkali internally. He had had no experience with the combination used by Dr. White. The fact that in any given urethra about one half of the lacunæ opened backward was, as Dr. White had suggested, an important factor in the persistence and recurrence of gonorrhœa. The lacunæ which opened backward formed a nidus for the reception of gonorrhœal poison.

DR. F. T. BROWN said he was so thoroughly satisfied as to the position of Neisser that he did all his work on the presumption that his statements were going to hold good. He had relied upon the Lafayette mixture, with the employment locally of bichloride retrojections—1-30,000 to 1-15,000. After a week's use he generally combined a weak solution of nitrate of silver—1-1,000 to 1-2,000.

DR. J. B. WHITE thought the preponderance of evidence was to the effect that gonorrhœa was a specific disease. He had not seen satisfactory results from deep urethral injections. He had sometimes seen considerable urethrovésical irritation occasioned by them. He had not had satisfactory results from the use of the bichloride solution, either in the mild or strong solution. He had obtained better results from simply washing out the urethra with warm water, and then injecting a mild solution of sulphate of zinc. As a rule, he did not give any internal treatment unless the symptoms required it.

DR. J. A. FORDYCE had used in one hundred and fifty or two hundred out-patients of the Bellevue Hospital a solution of nitrate of silver in the strength of about 1-2,000 to 1-4,000. This gave rise in some exceptional cases to bloody urine, in others to great pain on urination, so that treatment had to

be suspended or the solution made weaker. In some cases in which the nitrate of silver caused much pain he gave the Lafayette mixture internally. He thought he got better results from this weak solution of nitrate of silver than from the ordinary injections, and felt disposed to continue its use.

DR. A. POST thought in testing new remedies, first cases of gonorrhœa were the only ones that should be considered. He was surprised that so little value had been placed on the oil of sandal-wood, which he regarded the best of antiblennorrhagics. It certainly was equal in efficacy upon the gonorrhœa with copaiba, and much less likely to upset the stomach. His favorite injection was a very dilute solution of bichloride of mercury. He did not use injections during the acute inflammatory stage.

DR. W. K. OTIS thought salol, if efficacious, a particularly good remedy, because while giving that it would not be necessary to give injections. Even if one believed in the gonococcus, one would not give injections in the acute stage, because the gonococcus was then already out of the reach of injections, and there was a risk of causing a posterior urethritis by washing the pus down the urethra. In case of fresh gonorrhœa, he thought recovery in six weeks was doing well. He was using injections of the nitrate of silver. Patients bore it well as strong as 1 to 1,000.

DR. E. R. PALMER believed in the gonococcus and in the antiseptic treatment of gonorrhœa. He had had some very favorable experience in the matter of irrigation. This he applied with the Kiefer nozzle rather than with the catheter. He believed that the solution of the problem lay largely in internal medication. There had been an era of internal medication in the past, but that was a blind one compared to this. There were the same objections to internal treatment as to local treatment: the remedies used were liable to cause disturbance. Salol did not disturb the stomach and should be given up to fifteen grains three times a day. He was surprised to hear the statements as to the strength of nitrate-of-silver solution as used. He began in acute cases with a little citrate of potash internally and hot applications. As soon as it could be borne he used bichloride of mercury, the strength of the wash being determined by the sensitiveness of the urethra. A four-per-cent. solution of cocaine would relieve the sensitiveness if it were great. He sometimes also used the boric-acid injection for its soothing effect. In the stage of decline he used an injection of nitrate of silver, five to seven and a half grains to the ounce. This injection was carried down fully six inches by means of the long solid silver catheter. If the patient complained of pain, he used cocaine. Such injections were given two or three times a week. Sometimes hot boric-acid injections were used after them, and the patient was allowed to use at home any of the old injections.

DR. GLENN said that during the last five years he had obtained good results from the use of weak non-irritating injections of chloride and iodide of zinc—iodide of zinc, gr. x; chloride of zinc, gr. ii; water, $\frac{3}{4}$ vj—injected with a long syringe with a good nozzle. He used it at any stage that the patient would endure it.

DR. L. B. BANGS said he had no routine treatment. He tried to overcome hyperemia by rest in bed. He did not use bichloride injections. If

he used bichloride irrigations, it was to secure good drainage and soothe the mucous membrane.

DR. J. P. BRYSON alluded to a paper written by Dr. Burnett and himself which was based on the observation of 1,394 cases of gonorrhœa observed at his clinic. It gave the amplest possible clinical confirmation of the specificity of gonorrhœa and also of the assertion that the micrococcus of Neisser was the specific element in the production of the disease. The paper dwelt also upon two points connected with the internal administration of remedies: 1. The sterilization of the urine. Healthy urine was excrementitious, but, in his judgment, not septic. It became at times septic, and then to sterilize it would be to use proper treatment. 2. All those remedies which acted through the urine also acted, and, as he thought, more directly and thoroughly, upon the gonococcus through the blood. His opinions were fully expressed in that paper and had not in any way changed.

DR. J. W. WHITE said he had seen exceedingly severe irritation set up by an injection of nitrate of silver as strong as five or seven grains to the ounce of water, and also that he was afraid of urethral injections of cocaine.

The following officers were elected for the coming year: President, Dr. F. N. Otis; Vice-President, Dr. A. T. Cabot; Secretary, Dr. J. A. Fordyce; Members of the Council, Dr. R. W. Taylor and Dr. J. P. Bryson.

The following new members were elected: Dr. George Brewer, of New York, Dr. William Judkins, of Cincinnati, and Dr. E. M. Culver, of New York.

The next meeting will take place in Washington on September 22, 23, and 24, 1891.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN GREAT BRITAIN.

Exfoliative Dermatitis, or Pityriasis Rubra.—Dr. Stephen Mackenzie's paper on General Exfoliative Dermatitis, in the *British Journal of Dermatology* (vol. i, No. 9), gives an account of twenty-one cases of this rare disease, all observed in the London Hospital. The disease he regards as being defined by three characters, viz.: (1) Its universality; (2) more or less intense hyperæmia; (3) more or less profuse desquamation. In severity and in the amount of constitutional disturbance associated with the disease there is great variation. The ages of the patients were from fifteen to eighty-four, but the greater number occurred in middle life or after, two thirds of the cases occurring between forty and seventy. The cases are divided into five groups: Group A contains eleven cases of primary exfoliative dermatitis; Group B, five cases in which this condition supervened upon or was connected with eczema; Group C, two cases following psoriasis; Group D, two cases of uncertain type; and, finally, one case, placed by itself, of pemphigus foliaceus, which is by some writers regarded as a form of exfoliative dermatitis. Thirteen cases were in males, eight in females. The duration varied from a few weeks to fifty years.

Mode of Evolution.—Although cases differ in the manner of commencement, when the disease is once established they are so much alike that it would be impossible to say how they originated. In most cases it began as red patches, rough or papular, which spread over the whole surface, sometimes within a week, sometimes taking some years to become universal.

The family history of the patients showed nothing remarkable, except that in five cases there had been some skin disease in other members of the family; in four cases that disease was psoriasis. As regards the personal history, three patients had suffered from gout, and one had had, forty-eight years before, an attack of rheumatic fever. Syphilis had occurred in one case, and one patient only acknowledged having drunk to excess.

The duration of the disease previous to observation varied from some weeks to many years, even thirty and forty-eight, respectively.

In ten cases the eruption was absolutely universal, in the rest very nearly so, only the palms and soles or some small portion of skin escaping.

The nails are noted to have been affected in eight cases and the hair in four; but possibly these conditions may have been overlooked in some of the cases.

Two cases were fatal, one from broncho-pneumonia, besides the case of pemphigus foliaceus. Cure is recorded in six cases, and most of the others were much improved by treatment.

There are striking divergencies between the accounts given of this disease by different authorities, especially as to certain symptoms—such as thickening of the skin and pruritus, both stated by Hebra to be absent in pityriasis rubra, though recognized by others. Dr. Mackenzie found the skin to be thickened in six of his cases, and thinks it was so to some extent in nearly all. Itching or burning was noted in thirteen of the twenty-one cases, not noted in seven, and recorded as absent in one only.

Diagnosis.—Dr. Mackenzie does not regard this as difficult if we agree to call cases exfoliative dermatitis which present the characters given above, irrespective of their mode of origin. But there is a difficulty in saying when we are to cease to call some cases eczema or psoriasis and begin to call them exfoliative dermatitis. It is here impossible to lay down any arbitrary line; and individual opinions must be allowed play.

[The reporter certainly thinks that some of Dr. Mackenzie's cases, even one at least of his so-called "primary" class, would be called eczema by some dermatologists; and it is very difficult to see how another, which began as psoriasis and afterward recurred to psoriasis, should not have been called by this name all along. The case of pemphigus foliaceus was evidently different from the rest. Though some writers have regarded this as identical with exfoliative dermatitis, Dr. Mackenzie's own opinion, formed on a study of this case, is that the two diseases are essentially different.]

Treatment.—This consisted chiefly in swathing the patient from head to foot in bandages steeped in a lotion of diluted glycerole of lead (one ounce with an ounce of glycerin to a pint of water). When the hyperemia was subdued and the scales removed by this application, vaseline or some simple greasy application was rubbed all over the body. Internal medication seemed of less use, though arsenic was given in the majority of cases, but it

was difficult to gauge its effect. Subcutaneous injections of pilocarpine were of great service in one case.

In conclusion, Dr. Mackenzie confesses that he is unable to throw any light on the nature of the disease. The particulars of the cases are given in a tabular form.

Congenital Adenoma Sebaceum.—Dr. J. J. Pringle (British Journal of Dermatology, Jan. 7, 1890) describes under this name a rare skin disease affecting the face. It may be characterized roughly as consisting of small tumors, somewhat resembling milium, and arising from the sebaceous glands of the face. It had already been described by Balzer, of Paris, as “*adénome sébacé*” in two cases; and three other cases were found to be also represented by models in the St. Louis Museum at Paris.

Dr. Pringle's case was that of a married woman, aged twenty-five, suffering from dyspepsia and from an eruption of the face which had existed more or less since infancy. Since the age of sixteen it had, however, been diminishing spontaneously. There had never been acne or comedones, nor dandruff of the scalp. There was a history of some general affection of the skin over the whole body, but probably this was of a different nature. The patient was a brunette, well nourished, and presenting no symptoms of any internal morbid condition except the dyspepsia. Her intelligence is described as being decidedly below par, and her mother, who accompanied her, was also “not particularly bright intellectually.”

The eruption is described as follows: It is distributed over the eyelids, the whole of the nose, except the part above the bridge and the nasolabial folds, the cheeks, the under surface of the lower lip, the geniolabial folds, and the chin. The upper lip is almost free, the scalp, neck, and ears completely so. (The forehead is said to have been formerly thickly covered.)

The eruption consists of indolent, firm, whitish or yellowish, sago-grain-like, solid papules, or little tumors imbedded in the skin at various depths or projecting from it, and varying in size from a pin's point to a small pea. Below the level of the mouth the smallest lesions are found, and they are paler and more refractile than the rest. The largest lesions are present at the angles of the nose, in the nasolabial folds and on the adjacent parts of the cheeks. Some are flat-topped, others rounded, a few acuminate and warty-looking. Although thickly crowded, they never coalesce to form composite patches. There is no solution of epidermis or visible excretory duct, but, when pricked, white matter, recognizable as inspissated sebum, can be pressed out.

Intermingled with these lesions are innumerable minute capillary dilations and stellate telangiectases, some so incorporated with sebaceous projections as to give them a uniform diffuse red color. Some of these project on the surface, others not.

(Besides these lesions there was a diffuse hyperæmic blush of forehead, cheeks, nose, and chin, which was recognized as a slight form of acne rosacea, due to digestive disturbances, and was easily cured.)

A portion of skin was cut out from the left angle of the nose and examined by fine sections, of which microphotographs are given.

Some papillæ were found to be hypertrophied, and in the interpapillary

depressions were recognizable some rudimentary hairs. The papillary layer of the corium was immensely hypertrophied.

The essential lesions, however, consisted in an enormous increase in the number and complexity of the sebaceous glands, recalling at first glance the acquired condition called "sebaceous rhinophyma."

Many of these were in obvious connection with hair follicles by ducts, but others lay deeper, quite below the normal level of the bases of the hair follicles, and their number and position made it inconceivable that all could be in connection with hair elements. There was sebum in many of the glands, the epithelium of which was well formed and showed no retrogressive changes, while an accumulation of small cells, of epithelial type, clearly showed continuous formative activity.

No morbid change was seen in the few sweat glands present in the sections.

No satisfactory mode of treatment was found, but marked spontaneous improvement occurred during the year the patient was under observation.

The five other known cases are described. All are represented by models in the St. Louis Museum; but two only, those recorded by M. Balzer, have been published.

The author comes to the following conclusions: That Balzer's name *adenoma sebaceum* is rightly applied to a certain group of cases, the essential element of which is hypertrophy of sebaceous glands, especially on the face. That the condition is congenital or observed in early life; it increases up to puberty, when it is frequently aggravated, but afterward remains stationary or disappears.

A certain amount of concomitant vascular change or telangiectasis is always present, and sometimes in regions apart from the sebaceous changes.

The subjects of the disease appear to be generally below par intellectually, and females are affected more frequently than males.

The paper is illustrated by a chromolithograph of the face.

Xeroderma Pigmentosum.—Three cases of Kaposi's disease have been described by Dr. Brown Hunter in the British Medical Journal.

Two of these cases—boys, brothers, aged seventeen and twelve—were seen by the author, and are illustrated by figures taken from photographs. The other was an elder brother who had died at the age of eighteen, probably of phthisis, but who by adequate testimony might be regarded as having suffered from the same skin affection. There are four other children living, at ages from nineteen to five, who are unaffected. The parents are healthy people, engaged in agriculture, and all the family are much exposed to the weather. The affection is said to get worse in summer and harvest and to improve somewhat in winter. The two cases described are as follows:

CASE I.—C. C., male, aged seventeen, health good. At the age of four years numerous dark freckles came out on his face, and since then the same have been continuing to appear on his face, neck, hands, forearms up to elbows, and slightly on the legs. About two years ago he had an ulcer as large as a shilling on the right cheek which was burned with strong nitric acid, and thus completely healed. No other ulcer appeared. At the time of observation his face presented the following characteristics:

1. Freckles varying in size, some measuring in longest diameter 4 mm.
2. Small, hard, nodular bodies. 3. A few small red spots of telangiectasis.
4. White cicatricial spots varying in size, especially developed on the bridge of the nose and around the eyes. In consequence there is ectropion and some conjunctivitis. The lips are also swollen and prominent.

CASE II.—J. C., aged ten, healthy. Disease began at the age of five, and has attacked the same parts as in Case I. The face shows pigmented spots, small nodules, telangiectases, and one cicatricial spot. There is no ulceration. One hard tumor the size of a pea on the lower eyelid.

The distribution of the affection on the body is partly accounted for by the children having been accustomed to go about in the summer with bare arms and legs.

Artificial Cultivation of Ringworm Fungus.—Dr. Leslie Roberts describes (British Journal of Dermatology, September, 1889) researches undertaken for the purpose of verifying the observations of Duclaux on this subject. Duclaux, by growing the fungus in liquid media of vegetable origin, produced an aerial fructification which had not been seen before.

The media employed by Leslie Roberts were chiefly saccharine infusion of malt and alkaline beef-broth contained in Pasteur's flasks. Spores of trichophyton were obtained from cases of ringworm of the scalp in the St. Louis Hospital, Paris. The diseased patch having been cleansed with a solution of corrosive sublimate (1 to 200), short broken hairs were extracted with a sterilized forceps and their bulbous extremities snipped off with overheated scissors into flasks containing the cultivation fluids. These were afterward placed in an incubator at 30° C.

After about twenty-four hours colorless threads grow out from all sides of the bulb of the hair, which in a few days enlarge into a mycelial tuft of 3 to 4 mm. in diameter, and ultimately compound colonies of 1 cm. in diameter are found. As soon as any colony rises to the surface, the part exposed to the air becomes quickly covered with a snow-white powder (which is, apparently, regarded as the aerial fructification of the fungus). The liquid remains clear if the primary inoculation has been successful.

When the growth, three days old, is examined with a low power of the microscope, the mycelium is seen to be regularly septate and well filled with granular protoplasm. The tubules continue to grow at their apices while lateral branches are given off, mostly at right angles. There are also seen ampulla-like dilatations of the tubes, sometimes at the growing ends, sometimes on the continuity of the tubes. The nature of these is uncertain; possibly they are "mycelial spores," or possibly asci.

When the mycelium is about to fructify, the tubules enlarge and undergo segmentation so as to resemble chains of beads. In the aerial or fructifying part the mycelium becomes finer. The spores grow for the most part symmetrically and are pear-shaped, being attached to the tube by their smaller end.

The character of this fructification suggests an affinity between trichophyton and the caterpillar-destroying fungi, cordyceps and botrytis; but some other characters differ in the two groups.

Inoculation Experiments.—The fungus thus cultivated was inoculated

into the skin of a guinea-pig and produced a circular patch with loosened hairs, which, on microscopical examination, were found to be surrounded by a mycelium having all the appearance of trichophyton. This on cultivation reproduced the original fungus. Dr. Roberts also inoculated his own arm and produced a patch identical in appearance with tinea circinata.

Dr. Roberts concludes that the trichophyton is a fungus able to vary its form according to the soil in which it grows. On solid and nitrogenous soils it develops only a mycelial growth; but in a thin medium, especially one of a saccharine constitution, a thallus with special organs of fructification is produced. Verujski has proved that the proper aliment of trichophyton is glucose and not a nitrogenous body, as was formerly thought. Hence the fungus never develops special fructification organs in the epidermis.

[The reporter also obtained some time ago, by cultivation of ringworm hairs in liquefied gelatin-peptone, a fungus resembling Dr. Roberts's figures; but, finding it differ so much from the usual form of trichophyton, rejected it, perhaps too hastily, as a mold accidentally present.] J. F. PAYNE.

(To be continued.)

Selections.

Syphilis and Prostitution.

THE memoir of Dr. Commenge concerning the prophylaxis of syphilis and of prostitution, recently submitted to the Paris Academy of Medicine, contains many facts of interest bearing upon the agency of clandestine and licensed prostitution in the propagation of venereal diseases.

The report is based upon an analysis of the official documents of the prefecture of police of Paris, covering a period of ten years—1878-'87.

The women engaged in prostitution were divided into three classes:

1. Women who are registered, either by card or in houses.
2. Registered women called *femmes du dépôt*, who, although under control, are objects of frequent arrest (from drunkenness, injuries, etc.), or of investigation by agents because they do not present themselves for monthly examination.
3. Women not under control—those who are engaged in clandestine prostitution.

The diseases are divided into three groups:

1. Syphilitic venereal diseases.
2. Non-syphilitic venereal diseases.
3. Parasitic diseases, especially scabies.

The author examines the number of cases of detected disease in comparing them to the number, first, of visits made; second, of women examined.

There were 305,799 visits made to prostitutes licensed by card and living separately—3·12 per cent. were for syphilis, 3·06 per cent. for non-syphilitic venereal diseases, and 0·36 per cent. for scabies; 503,712 visits were made to

women living in licensed houses of prostitution—of these, 2.70 per cent. were for syphilis, 2.52 per cent. for non-syphilitic venereal diseases, and 0.30 per cent. for scabies; 76,740 visits were made to women irregularly under control (*femmes du dépôt*)—of these, 23.96 per cent. were for syphilis, 14.46 per cent. for non-syphilitic venereal diseases, and 4.06 per cent. for scabies.

To women not under control 27,041 visits were made—166 per cent. were for syphilis, 134 per cent. were for non-syphilitic venereal diseases, and 19 per cent. for scabies.

For each 1,000 visits the proportions were almost the same for women licensed by card (living alone or in houses of prostitution); the women under irregular control give an average of 23.96 per cent. per 1,000. Syphilis, then, is eighteen times more frequent among these women. The proportion of syphilitics among the unlicensed women who engage in clandestine prostitution is quite exceptional—166 syphilitics for each 1,000 visits.

M. Commenge then examines carefully the number of patients found in each series, classing them by groups of individuals and not proportionally to the number of visits.

Of 13,048 women licensed by card, living separately, 2,002 were found diseased—952 (7.30 per cent.) affected with syphilis, 936 (7.16 per cent.) suffering with non-syphilitic venereal diseases, and 114 (0.85 per cent.) affected with scabies.

Of 10,494 women living in licensed houses of prostitution, 2,786 were diseased, among whom 1,361 (12 per cent.) were syphilitic, 1,272 (13.12 per cent.) had non-syphilitic venereal disease, and 146 (1.32 per cent.) had scabies.

Of 27,041 unlicensed women, 8,683 were diseased: 4,513 (16.69 per cent.) had syphilis, 3,640 (13.41 per cent.) had non-syphilitic venereal disease, and 530 (1.95 per cent.) had scabies.

These statistics concerning syphilis among the unlicensed would be much more considerable if these women were examined as often as the licensed women, who consequently figure several times as syphilitics. Women are sent to the hospital upon the appearance of the first sign of syphilis. They are thus rendered incapable of transmitting the disease, and are not liberated until after the complete disappearance of all accidents.

The result of the suppression of the Contagious Disease Acts in England in 1885, and the cessation of the periodical visits of prostitutes, is shown in an increase of syphilis among English soldiers. Thus, of fourteen stations under observation, the proportion was 27 per cent. in 1885; in 1888 this proportion had risen to 42 to 49 per cent., and even 61 per cent. at Windsor and 72 per cent. at Portsmouth.

In Paris it is impossible to determine the exact number of unlicensed prostitutes living exclusively from prostitution, but it is certain that among 27,034 unlicensed women examined from 1878 to 1887, there were 8,683 discovered to be diseased.

On *résumé*, the author indicates that among 16,747 women recognized as diseased in the ten years, 2,003 were licensed by card, 2,779 living in licensed houses of prostitution, 3,283 were women irregularly under control, 8,683 were not under control.

These figures show the necessity of a rigorous surveillance, and they dem-

onstrate anew and with precision the dangers of clandestine prostitution.—*Bulletin de l'Académie de médecine*, May 27, 1890.

Subcutaneous Injections of Quinine, together with a Case of the Incidental Effects of the Drug.

PROFESSOR H. KÖBNER (*Deutsche medicinische Wochenschrift*, 1890, No. 15) is prompted to report the following case to illustrate the disagreeable effects which may be produced by the subcutaneous use of quinine in susceptible subjects by reason of the assertion of Bacelli (2. Congress der italien. Gesellschaft f. innere Med., October, 1889) that the intravenous injection of from 0.1 to 1.0 of a neutral solution of quinine for malarial fever is always followed by a disappearance of the fever and a complete cure of the disease.

Professor Köbner was consulted in the winter of 1887 by a Dr. X on account of his son, an extremely weakly, pale, and sensitive boy, four and a half years of age, who had been troubled for over a year with attacks of typical urticarial eruption coming on in the morning between eight and nine o'clock, from September, 1885, to June, 1886, since that time from two to half past two o'clock in the afternoon : the attacks occurred before eating.

In 1884 the child had suffered for some months with pertussis, then typhoid fever, and measles. One year before the occurrence of the urticaria, however, he was well.

The internal use of quinine together with the bromides at night were ordered, and the father was advised, in case the quinine by the stomach produced no result, to use it hypodermically.

After some time the father returned with his son and stated that he had immediately resorted to the subcutaneous quinine injections, as on a previous occasion the use of quinine by the stomach was followed by vomiting, extreme paleness, and difficulty in hearing.

Two hours after an injection of 0.3, three or four spots of purpura appeared on the chest, followed within a few hours by other spots of purpura on the abdomen and thighs, together with abdominal pain and bloody discharges from the rectum.

The bloody stools (five in all) ceased within twenty-four hours after the internal use of opium and cold application over the abdomen. After five days a second injection of the same amount of quinine was given with a like result.

This child presented in the highest degree the anæmia and nervous irritability which characterized the cases of scarlatina-like eruption after the use of quinine to which Köbner called attention in his article on quinine eruptions in the *Berliner klin. Wochenschrift* for 1877.

Multiple Primary Carcinomata.

IN spite of the frequent occurrence of simple primary carcinomata in every possible part of the body, the occurrence of several primary cancers is a noticeably seldom event. It is most frequently observed to follow certain skin affections which present allied features, as in the case of xeroderma pigmentosum, senile seborrhœa, also in chimney-sweep's cancer, and in tar and paraffin cancer. In all of these examples a gradual hypertrophy of the epi-

dermis is produced from external irritation leading to its desquamation, papillary hypertrophy, and finally to cancer formation.

The author cites three cases in which a multiple outbreak of the disease occurred where the epidermis was intact and healthy—on the hand and lower eyelid of a woman aged eighty years, on the neck and face of a man sixty-one years old, and finally on the ear and lower lip of a seventy-four-year-old patient.

Very few reports of multiple cancers of the internal organs have been observed, partly on account of the rarity of primary growths of the internal organs, and partly because general attention has not been called to the subject.

There are, however, a number of cases reported of the simultaneous occurrence of cancer in symmetrical organs, as in cancer of both breasts, and of both suprarenal capsules.—Dr. C. Schimmelbusch, *Archiv f. klin. Chirurg.*, Bd. xxxix, Heft 14.

Dislocation of the Penis beneath the Skin of the Scrotum.

DR. SERGEÏ MALINOVSKI records in the *Khirurgicheski Vestnik* a case of very unusual injury to the penis which occurred while he was acting as *ordinator* or *chef de clinique* in Professor Levshin's wards in Kazan. A man who had been employed in minding a horse that was working a mill got entangled in the machinery, the trousers being drawn between a horizontal and vertical cogged wheel, and the penis was injured. There were two great wounds—one an extensive rupture of the prepuce close to the corona, the other a rupture of the integument of the scoto-penile fold on the left side, the body of the penis itself slipping under the skin of the scrotum. He was attended in a rural lazaret by a *feldsher* (hospital sergeant), who did not reduce the dislocation or suture the wounds, but contented himself with applying antiseptic dressings. In about three weeks the man had quite recovered. From the first there was no swelling of the scrotum and no difficulty in micturition, the only thing he complained of being the impossibility of coition. When he was admitted under Professor Levshin, four months after the accident, the glans was to be seen projecting from the wound in the left scrotopenile fold, the lips of which had closed around the sulcus, the rest of the penis being felt as a freely movable body beneath the skin of the scrotum, and the skin of the penis hanging down in front of the scrotum like an apron attached to the cicatrix by its inferior border. This skin, or so-called cutaneous tube (Nélaton) of the penis, the lumen of which was obliterated, was first made permeable and dilated by means of tents, and repeated attempts made to return the body of the organ into it. Ultimately, however, these were abandoned, and recourse had to a plastic operation, the body of the penis being released by slitting up the scrotum, and a new covering being formed for it partly out of scrotal integument and partly out of its proper skin. The result was entirely satisfactory, the power of coition returning. There was, however, some shortening of the organ. Dr. Malinovski has only been able to find four previous cases of dislocation of the penis recorded in medical literature, at least since the year 1850, when Nélaton published a case occurring in a boy of six.—London *Lancet*, April 12, 1890.

Book Reviews.

Syphilis et santé publique. Par T. BARTHELEMY, médecin nommé au concours de Saint-Lazare, etc. Avec cinq planches. Paris: Librairie J. B. Baillière et fils, 1890.

THIS study of social hygiene, the author informs us, is the result of many years of research and of reflection. The work embodies many original and practical ideas, expressed in a most charming style, and which can not fail to be of interest both to the profession and the public.

In France the relation of syphilis to the public health and the dangers of clandestine prostitution has attracted a large share of professional attention within the last few years. Fournier, in his masterly report upon the Prophylaxis of Syphilis, presented before the Paris Academy of Medicine, some three years ago, exposed the dangers of clandestine prostitution and its agency in the propagation of syphilis, and made an eloquent appeal for the strict regulation of prostitution as the only means of repressing the social evil. The recent report of Dr. Commenge before the same body, reference to which will be found on another page of this Journal, shows the extraordinary preponderance of venereal diseases among the class of women not subject to police surveillance.

The first chapter of the work opens with a consideration of the pernicious influence of alcohol upon dermatoses in general and upon syphilis in particular. He shows that alcohol not only plays a prominent rôle as a predisposing factor in the acquisition of syphilis, but that it makes a material impress upon the gravity of the disease, upon the form, intensity, and duration of its manifestations. In connection with the subject of alcoholism, he directs attention to a class of women called *les irritieuses*, who constitute a most active agency in the spread and aggravation of syphilis. According to the author, nearly all of these "women of the beer saloons" are diseased, and the fact has been established that fully one half of all cases of syphilis occurring in young men in the different Paris schools have been contracted from *les femmes de brasserie*.

In the second chapter he considers the manifold modes in which syphilis may be innocently contracted, and points out the dangers of the *autourage* of the syphilitic.

In the general prognosis of syphilis he discusses not only the immediate but the remote consequences of syphilis to the individual, the multiple and grave disorders which it entails, constituting what he terms the invalidism of syphilis. Following in the footsteps of Fournier, he directs attention to the precocious and late manifestations of hereditary syphilis, its murderous influence upon the offspring, revealed in the numerous abortions and frightful mortality, the physical defects and mental deterioration, and the other parasymphilitic products of hereditary syphilis.

The second section is devoted to the prophylaxis of syphilis. His conclusion that the rigid regulation of prostitution constitutes the only possible prophylaxis of syphilis is based largely upon the results of the enforcement of this law in France and foreign countries. Syphilis he regards as an inter-

national question, and his arguments are in the line of those which he used to enforce his resolutions presented before the Paris International Congress of Dermatology and Syphilography, of 1889, recommending that the Government impose inscription and obligatory visits upon all women who devote themselves to public prostitution.

Items.

American Dermatological Association.—*Programme of the Fourteenth Annual Meeting, to be held at Richfield Springs, New York, September 2, 3, and 4, 1890.*—Officers for 1890: President, Prince A. Morrow, M. D., of New York. Vice-President, George H. Tilden, M. D., of Boston. Secretary and Treasurer, George Thomas Jackson, M. D., of New York. The meetings of the association will be held in the parlors of the Spring House.

First Day, Tuesday, September 2, 1890.—Business meeting (with closed doors) at 9.30 A. M. Report of Council. Nomination of officers for the ensuing year. Appointment of Auditing Committee. Proposals for active and honorary membership. Miscellaneous business.

Morning Session, at 10.30 A. M.—Address by the President, Dr. P. A. Morrow. 1. Observations on Prurigo, Clinical and Pathological, Dr. R. W. Taylor. 2. Prurigo in the Negro, Dr. R. B. Morrison. 3. A Clinical Study of Pruritus Hiemalis; Winter Itch; Frost Itch, etc., Dr. W. T. Corlett. 4. A Study on Pruritus, Dr. E. B. Bronson. Adjournment.

Afternoon Session, at 3.30 P. M.—5. Note relative to a Case, probably, of Cancer en Cuirasse, Dr. J. N. Hyde. 6. A Case of Atrophia Maculosa et Striata following Typhoid Fever, Dr. F. J. Shepherd. 7. Electrolysis in the Treatment of Lupus Vulgaris, Dr. G. T. Jackson. Adjournment.

Second Day, Wednesday, September 3, 1890.—Business meeting (with closed doors) at 9.30 A. M. Report of Treasurer and Auditing Committee. Election of officers. Election of active and honorary members. Selection of time and place of next meeting. Miscellaneous business.

Morning Session at 10.30 A. M.—8. Immigrant Dermatoses, Dr. J. C. White. 9. Notes on Some Rare Cases, Dr. G. H. Fox. 10. Cases of Cutaneous Tuberculosis, with Histological Studies, Dr. J. T. Bowen. 11. Cases from the Hopkins Hospital Clinics, Dr. R. B. Morrison. 12. Plica, Dr. H. W. Stelwagon. 13. Treatment of Erysipelas, Dr. C. W. Allen. Adjournment.

Third Day, Thursday, September 4, 1890.—14. Remarks on the Treatment of Dermatitis Herpetiformis, Dr. L. A. Duhring. 15. Treatment of Ringworm and Favus of the Scalp, Dr. H. W. Stelwagon. 16. Notes on Pilocarpine in Dermatology, Dr. H. G. Klotz. 17. Report on Aristol, Dr. C. W. Allen. Adjournment.

Cutaneous Manifestations of Malaria.—An Italian physician, Dr. Lariga, has made a contribution to the study of the cutaneous manifestations of malarial infection. He believes, from his own observations, that acute malarial infection can cause the appearance of cyanotic spots (*taches ombrées, macules cyaniques*) upon the skin. They appear during the paroxysms of fever. As factors in their production he regards (1) the individual predisposition to capillary telangiectases, and (2) the influence of the malarial poison upon the vaso-motor nervous system, upon the composition of the blood, and upon the state of the nutrition of the vessel walls.—*Weekly Med. Review*, April 26, 1890.

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Original Communications.

A CASE OF CYST OF THE KIDNEY APPARENTLY CURED BY A SINGLE ASPIRATION.*

By A. T. CABOT, A. M., M. D.

ON November 22, 1889, Mrs. A. A. L. was seen and the following history was obtained: Nine years ago, after a long cramped ride, she had an attack of pain in her bowels. This pain was spasmodic in character, and was accompanied by a lump in the right side of her abdomen. According to her present recollection, this lump was located about on the level of the umbilicus. In the next four years she had many such attacks, which were ascribed by some physicians to "fæcal deposit," and purgation was usually followed by relief. Seven years ago Dr. Rich, of Worcester, told her she had a floating kidney.

For the past five years she has been free from these attacks, until the 28th of last August, when she was again seized with a pain in the abdomen similar to that previously experienced. This was again accompanied by a lump in the right side and there was some vomiting. This time the lump did not disappear, as it had after the previous attacks, but steadily increased in size till it reached its present proportions, about eight weeks ago.

Since then it has remained practically stationary, though she thinks it varies somewhat in size and hardness from time to time. There is no pain about it, though occasionally there is some sensitiveness to pressure at different points on its surface.

Her bowels are regular, and there is no noticeable irregularity about her catamenia. There has been no disturbance of micturition, and nothing abnormal has been noticed about the urine.

Examination showed a tense, elastic tumor extending from just below the ribs on the right side down to the level of the anterior superior spine of the ilium. It reached a little across the middle line at the level of the umbilicus,

* Read before the fourth annual meeting of the American Association of Genito-urinary Surgeons, Altoona, Pa., June 3, 1890.

and round into the lumbar region, where it could be easily felt when pressed back from in front. It was smoothly ovoid in outline and slightly movable. When the patient was on her back it moved slightly up and down with respiration. It could not be reached through the vagina, and the pelvic organs seemed to be healthy in every way.

The amount of urine passed in the twenty-four hours was about a quart, and the specific gravity was low—from 1·006 to 1·008. It did not contain albumin, nor did the microscope discover any casts or abnormal cells.

For a week an accurate measure of the daily amount of urine was made, and at the same time the patient kept a close watch on the tumor, to see if there were any variations in size. No definite result was obtained, and afterward, when under constant observation for five days, no change in the tumor could be detected.

The locality and character of the tumor led to a strong suspicion that it was a hydronephrotic kidney, and this feeling was strengthened by the history of previous attacks, accompanied by the presence of a tumor in the same region.

On December 14, 1889, the tumor was aspirated through the lumbar region. Three pints of dark-brownish fluid were drawn off, completely emptying the sac and causing a disappearance of the tumor. The abdomen was then compressed by a swathe with a pad of cotton batting over the former site of the tumor.

The fluid removed was examined by Professor E. S. Wood, who reported as follows: Color, brown. Specific gravity, 1·011. Reaction, very slightly acid. Albumin, 0·27 per cent.

There was much sediment, consisting chiefly of blood, normal and abnormal, and of small round cells, like renal cells, most of which were slightly fatty; also numerous brown granular cells of the same size as compound granule cells, but not fatty; two cylindrical bodies, somewhat resembling casts, one of which was brown granular and the other contained small round, fatty cells.

A quantitative analysis showed that 100 cubic centimetres contained 0·034 gramme of urea, 0·590 gramme of NaCl, and 0·270 gramme of albumin.

The small amount of urea in this fluid, and the character of the cells found in it, consisting of old and fresh blood and of compound granule cells, makes it seem probable that this was a cyst of the kidney rather than a hydronephrosis.

The cyst showed no sign of refilling, and Mrs. L. slowly gained strength. On March 20th (three months after the aspiration) Mrs. L. was seen and thoroughly examined. No tumor could be discovered in the right side, though there was, perhaps, a little more resistance than on the other side. She was still not strong, though steadily gaining. There had been a very decided improvement in the character of her urine. On March 24th the amount in the twenty-four hours was forty-one ounces, and the specific gravity was 1·016. The reaction was acid and no abnormally formed elements were to be found in the sediment.

There had been no reaccumulation of fluid in the cyst in three months, and in this time there had been so decided a gain in the quantity and char-

acter of the urine that it seemed probable that there had been a re-establishment of function in the remaining parts of the affected kidney.

This case is reported as an unusually favorable instance of what a simple aspiration may accomplish in these cases.

A CASE OF STRICTURE FOLLOWED BY RUPTURE OF THE
URETHRA AND EXTRAVASATION OF URINE.
EXTERNAL URETHROTOMY. RECOVERY.*

By J. BLAKE WHITE, M. D.,
Physician to Charity Hospital, New York.

IT is generally conceded that rupture of the urethra is not due solely to mechanical distention, since we know the bladder is susceptible of great expansion, but to the presence of some lesion, most commonly behind a stricture, that is increased by the constant contact of urine. Cases are on record in which the fundus of this organ has reached quite near the umbilicus without rupture either of the bladder or the urethra. From accounts of extravasation, which I have found quite meager, it would naturally be inferred that extensive infiltration supervenes immediately; but this has not been my experience. Extravasation is a process, generally, of gradual occurrence, advancing so slowly and unobserved by the general practitioner or the patient himself that the mischief has become diffused and the consequences not infrequently have become already disastrous before the surgeon is consulted. Such was the condition in the case which I will describe further on.

My attention was not called to this patient until suppuration had occurred in the scrotum, perinaeum, and ileo-abdominal region, and the history of the case very plainly showed that the patient himself never deemed it necessary to apply for medical assistance before considerable damage was established. For several days after the rupture in the urethra had doubtless occurred he was going about, and, although experiencing pain, and weight gradually increasing, never supposed that his case required surgical attention, because the retention of urine was not complete, some being voided at intervals by the urethra. When extravasation finally became extensive and occasioned much suffering, he then requested the aid of the house surgeon, Dr. C. C. Parke, who, as early as possible, invited my attention to the case. All authorities upon this subject are unanimous in advising free incisions into the infiltrated structures, nevertheless they do so with a conscious dread that every incision may become

* Read before the fourth annual meeting of the American Association of Genito-urinary Surgeons, at Altoona, Pa., June 3, 1890.

a focus of gangrenous slough. Every incision being to a certain extent a constitutional shock, it is eminently important to practice no more than the exigencies of the case appear to demand. Since incisions are therefore universally admitted to be necessary, why not attack without delay the *font et origo mali*? The aim in these cases should be to take off the tonicity of the bladder, which can be best accomplished by liberating the accumulating cause of the infiltration. As the kidneys are ever excreting, this can only be done by securing a decided and direct flow from the bladder. Any measure, therefore, looking to radical relief would seem to be especially indicated, for attempts to enter the bladder by means of a catheter are often foiled, and urethro-vesical irritation is so likely to ensue from the presence of a catheter when retained for any length of time in the viscus.

With these considerations strongly in view, I resolved on perineal section in the case which I have to relate.

J. W. A., aged forty-seven years, married, is a driver by occupation and a hard drinker. Is addicted to periodical outbursts of inebriety. About twenty years ago he had a sore on the penis, appearing about four days after a suspicious coitus, followed by a bubo, which suppurated and healed, in the left inguinal region. At the same time the patient noticed a profuse discharge from the urethra, which continued for some weeks. He consulted a physician, who treated him with injections to his speedy relief, not without, however, leaving him subject to chronic gleet, which, of course, meant the establishment of a stricture.

From this date the stream of urine underwent gradual diminution, and terminated finally in retention of urine. This condition was relieved by catheterization. Subsequently he had recurrences of retention which were bridged over for a time in like manner. Next he was subjected to internal urethrotomy, but no sounds were regularly passed after the operation.

For about two years he experienced comparative relief, after which time the symptoms of return of stricture again threatened.

During the past year he has suffered repeated attacks of retention which were treated solely by a resort to the catheter.

On April 12, 1889, according to the statement of Dr. Parke, house surgeon of Charity Hospital, this man was seized with retention of urine, with symptoms of extravasation. Attempts were made, without success, to pass the catheter. At this juncture the patient was etherized, and so enabled to pass some water by the urethra. His condition intensified, nevertheless, in gravity, and on the following day, when my attention was first called to his case, I found his condition extremely critical. The facial expression was anxious, pulse rapid, and temperature 105° . Upon examination, a large, doughy, dusky-red intumescence, hot and painful to the touch, was discovered in the perineum, a little more prominent to the right of the raphé. There was also diffused infiltration into the scrotum, involving the penis and ileo-abdominal region. Having made up my mind that immediate surgical proceedings were demanded, I requested my colleague, Dr. J. E. Kelly, who was

at the time visiting in the hospital, to see the case. I acquainted him with my decision to perform external urethrotomy, in the necessity of which procedure he concurred.

The patient was etherized and an incision made into the perinæum. This liberated a quantity of fetid pus and urine, and an entrance to the bladder was effected, not without difficulty, of course, owing to the deranged condition of the parts. A flexible catheter of large caliber was now inserted into the bladder through the perineal opening, and, after draining the bladder, it was allowed to remain for several days. Incisions were also made into the scrotum and such other sites as indicated the presence of pent-up-decomposed fluids, permitting their escape, together with sloughing tissues.

Sounds were passed during the progress of the case every second day and the bladder irrigated daily with an antiseptic solution to relieve a cystitis originating from urine which had been retained before the operation. Charcoal and iodoform dressings were applied to the scrotum and other proximate surfaces showing a tendency to slough. At the expiration of eight days the perineal wound had put on a healthy disposition, and all wounds ultimately closed up by healthy granulation. Several small abscesses had formed over the left ileo-abdominal region which were excavated, and dressed antiseptically, and they also rapidly healed. For several weeks subsequent to the patient's recovery a large-sized sound was regularly passed at stated intervals, and I had the satisfaction of finally discharging him cured.

Had I heeded previous authorities in the treatment of this patient and practiced multiple incisions alone for the relief of the extravasation, I feel assured the case would not have made so speedy and favorable a recovery.

The report of this case is made as a plea for the institution of prompt and decisive measures in such class of sufferers. The patient is thus at once placed not only in a condition of relief, but beyond the instant peril of wide-spread sloughing and possibly septicæmia.

The prognosis, always grave, in cases of urinary extravasation, may be estimated, I submit, in the following order :

1. Should the infiltration not have extended beyond the perineal structures before operation, prospects of recovery are favorable.

2. Should the infiltration have involved the scrotum with the perineal structures, the operation, though affording the best chances of recovery, is not without hazard.

3. Should the infiltration extend into the perinæum and scrotum, involving also the ileo-abdominal region, the danger to the patient is vastly enhanced.

4. Should the infiltration descend to the ischio-rectal space, the prospects for the patient are exceedingly gloomy, since it threatens deep-seated sloughing from destruction of the superficial fascia, and a profound degree of constitutional shock follows in consequence. The powers of endurance of the patient constitute an important factor in the ultimate

success of every surgical operation. Therefore in the consideration of all such cases we must keep especially in view the fact that, unless originating from some traumatic cause, extravasations of the urine occur alone among subjects already so deteriorated morally and physically that they are illy prepared to endure with success the necessary amount of surgical interference for their relief. Nevertheless, to delay the institution of surgical measures in these cases would appear to be an unwarranted speculation upon the patient's powers of further endurance. Should radical operation be delayed and the necessary scarification practiced alone, the patient is required in the end to run the gantlet for his life afresh with superadded constitutional shock through the institution of important surgical measures for his permanent relief. The strongest arguments for speedy operation may be briefly summarized as follows:

The superficial fascia may give way and extravasated urine may gravitate backward, causing extensive sloughing in the ischio-rectal fossa and about the nates, undermining the rectum, as alluded to by Erichsen, and also as occurred in a case which fell under my own notice after this accident had taken place.

The urine, from long retention, becomes particularly concentrated and acrid, and destroys speedily all tissues with which it comes in contact. Expulsion of urine into the perinaeum through the minutest aperture along the urinary tract is caused by the natural tonicity of the bladder, and so burrows its way through the scrotal tissues upward, producing severe inflammation in every proximate structure, placing the patient in imminent danger. Yet it is remarkable with what rapidity reparation does occur as soon as the process of infiltration is arrested.

DISEASES OF THE NAILS.

By JOHN V. SHOEMAKER, A. M., M. D.,
Philadelphia, Pa.

NAIL is a special modification of the epidermis. Like the latter, therefore, it belongs to the class of horny tissues, and, indeed, is the characteristic expression of that tissue in the human body. A nail is developed at the terminal extremity and dorsal surface of each finger and toe, forming a plate, somewhat quadrangular in shape, convex from side to side, hard, elastic, and translucent. By virtue of its translucency the body of the nail is of a pink or rose-red color. It transmits the hue of the highly vascular bed upon which it rests.

The anterior extremity of the nail is free and thicker than the posterior or attached margin. The lateral edges and posterior extremity are received into a fold of the skin called the nail-groove. The portion

inclosed within the groove is called the root, the remainder being known as the body. The posterior part of the nail-bed, situated immediately beneath the root, is termed the matrix. As the matrix is more opaque and less vascular than the nail-bed in general it exhibits a whitish instead of a pink color. Its anterior edge extends a short distance in front of the root of the nail, and presents a crescentic outline, for which reason it is denominated the lunula.

The nail proper represents the epidermis. From a histological or a pathological point of view, however, it must be considered in relation to the matrix from which it springs and the bed upon which it lies, since these are directly concerned in its production, nutrition, and growth.

The bed of the nail differs little from the corium of other portions of the skin. The papillæ are large and very vascular. In front of the lunula they are arranged in rows parallel to the long axis of the nail, which communicates a longitudinally striated appearance to the nail when examined in a reflected light. Hensle has demonstrated that these longitudinal ridges commence at the posterior portion of the matrix as from one pole. The corium of the nail-bed is abundantly supplied with blood-vessels and nerves, but contains no fat. Nor does any fat exist in the layer of subcutaneous connective tissue by which the corium is firmly attached to the subjacent periosteum. The corium of the nail-bed is covered, as it is in other situations, by a basement membrane, upon which rests a stratum Malpighii, composed of soft cells. This layer, interposed between the horny nail and the corium of its bed, is histologically a portion of the latter. It follows the crests and depressions of the corium. The rete Malpighii, likewise, dips down into the interstices between the papillæ of the corium of the nail-bed, just as it does between the papillæ of the integument elsewhere.

Nail consists of several layers of flattened, homogeneous epithelial cells, firmly agglutinated by means of an intercellular substance. According to Klein, they represent the stratum lucidum of the cuticle. The under surface of the nail is firmly attached, by means of slight indentations, to the rete Malpighii.

Nails grow in length by development from the matrix. Their uniform thickness is maintained by transformation of the cells of the Malpighian layer of the nail-bed. These must, indeed, be considered as an important agency in maintaining the normal nutrition of the nail. Nails begin to develop in the third month of foetal life, and are completely formed by the end of the eighth month. The cells of the rete Malpighii rapidly proliferate, and the superficial layer is transformed into the scales of the stratum lucidum. They grow more rapidly in summer than in winter, in youth than in adult life. If left uncut they attain only a certain length; but if kept pared they grow continually.

Since nail is but modified epithelium, its chemical composition must correspond very closely to that of the latter tissue. The nail cells undergo desiccation. The principal chemical constituent of nail is a colloid substance, a derivative of albumen, to which the name keratin has been given. Keratin consists of the elements carbon, hydrogen, nitrogen, oxygen, and sulphur, the latter being present in a comparatively large proportion. As it is difficult to isolate in a pure state, the exact percentage composition of keratin has not yet been accurately determined.

The chemistry of nail has been studied by Scherer, Mulder, Donders, Lehmann, and others.* The results obtained by the first two observers may be thus stated :

	Scherer.	Mulder
C.....	51·09	51·00
H.....	6·82	6·94
N.....	16·90	17·51
O.....	22·39	21·75
S.....	2·80	2·80

The nails swell and soften upon prolonged immersion in warm water. Their cellular structure is demonstrated by the action of sulphuric acid or a weak solution of caustic potash or soda, especially when aided by the application of heat. By this means the epithelial structure becomes beautifully apparent. At first the cells are compressed into the form of flattened polyhedra; subsequently, they separate from each other. The nuclei are rounded and granular.

About one per cent. of mineral matter is also present in nail. The recent researches of Liebreich have shown that lanolin, a cholesterol fat, is a constant component of all varieties of keratinous tissue.

The swelling and softening of nail in boiling water are due to the keratin which it contains. This substance is not soluble in hot water unless the temperature be greatly raised by pressure. Neither is it soluble in ether or alcohol. It is colored yellow by nitric acid, and upon the action of sulphuric acid develops much leucin and tyrosin. The keratin of nail contains more sulphur than that of epidermis.

The mode of nutrition of nail presents a strict analogy to that of the hair. The function of the matrix of the nail corresponds to that of the papilla of the hair; but the whole bed of the nail, like the surface of the entire hair follicle, is subservient to its proper nourishment.

The function of the nails is, no doubt, chiefly mechanical. By their firmness they aid in many ways the prehensile action of the fingers, and, by a continuous slight elastic compression, they expand the tactile surface of their tips. Yet these horny plates, small as they are in comparison with the bulk of the body, certainly contribute, as does each tissue and

* Physiological Chemistry. By Prof. C. G. Lehmann. Vol. ii, p. 218.

structure, to the homogeneity of the blood, and consequently to the proper nutrition of the remainder of the body. The elimination of the component chemical elements from the nutrient fluid is a determinate, if humble, factor in the process of general nutrition. As they select their appropriate pabulum and store it up in their substance, they, to that extent, remove elements which exist in the blood for the purpose of being thus removed.

Although of such lowly organization, penetrated by neither blood-vessels nor nerve fibers, the nails, when carefully observed, reflect faithfully the effects of local or constitutional disease. Deriving their nourishment from the young cells of the matrix and bed, which depend upon a rich vascular and nervous supply, the healthy and characteristic physical formation of the nails is manifestly due to the integrity of their nutrient structures. Changes in the horny plates must, therefore, as a rule, originate in the condition of the tissue to which they are appendages. Hence they may exhibit the phenomena of hypernutrition or malnutrition. These disturbances may be general, consecutive to altered conditions of the general nutrition of the organism, of the blood, or of the nervous system. On the other hand, they may be of local origin and express disease of the matrix or bed. The nails, also, may be invaded by parasitic growth.

The color, transparency, and luster of the nails are a good index to the general state of the health. Anæmia, for instance, is as readily recognized in the pallor of the nails as in that of the skin, tongue, lips, or mucous membranes, and, in fact, the nails should, equally with the other structures named, be examined by the general practitioner. In leukaemia, likewise, the nails assume a deadly white color; in chlorosis they generally become pale, while in progressive pernicious anæmia they sometimes exhibit nutritive changes. Eichhorst* mentions a case of the latter disease in which they became thickened and fissured and crumbled off at the free edges. In scurvy, hæmorrhages may occur beneath the nails and give rise to inflammation of the bed, with subsequent loss of the nail. Falling of the nails is not infrequent in the course of diabetes mellitus. Dr. Follet† has called attention to loss of the nails as a fact which should excite a suspicion of the beginning of diabetes. He quotes the case of a lady patient, twenty-six years of age, apparently in the most robust health, but who complained of feelings of weight after meals, accompanied by giddiness and hot flashes. But some of her finger and toe nails had fallen off, leaving the subungual dermis covered with a fine pink epidermis, showing no change whatever. There was no trace of inflammation in the matrix. The father of the patient, who was not syphilitic, had seen his nails fall off in the same way

* Handbook of Practical Medicine. By Hermann Eichhorst. New York: William Wood & Co., 1886. Vol. iv, p. 20.

† *Revue des sciences médicales*, April 15.

without pain or suppuration, and eighteen months after the appearance of this accident he died of diabetes. This information induced M. Follet to examine the urine of the patient, in which he found decided manifestation of the presence of sugar. Similar cases have fallen within my own observation. A stout and vigorous farmer, about sixty years of age, lost his great-toe nails a short time prior to the advent of symptoms of diabetes.

Diabetes, however, is not the only malady in which this evidence of lowered nutrition may occur. Prof. A. Pitres, of Bordeaux, reports* two cases of locomotor ataxia, attended by spontaneous and intermittent falling of the nails of the great toes. Several weeks before separation there was dull pain in the extremity of the affected toes, but neither suppuration nor ulceration of the matrix. The fallen nails were rapidly replaced by newly formed normal ones. No injury had been inflicted upon the nails. Prof. Pitres believes that the phenomenon in question is referable to deranged nutrition of the matrix, dependent upon medullary lesions of *tabes dorsalis*.

Dr. Acland † exhibited to the Medical Society of London, March 22, 1890, a patient suffering from a symmetrical trophic lesion of the nails. "It commenced in the left ring-finger nail three months previously, which became separated from the matrix; the affection quickly extended to all the other fingers of the same hand and then to those of the right hand and to the toes. The ends of the fingers were clubbed; under the nail secretion had accumulated which had become impregnated with dust, and the nail was much altered in structure." Dr. Acland believed that the condition resulted from Raynaud's disease, and this was confirmed by a suspicious redness, looking like a chilblain, along the upper margin of some of the nails. There was no specific history, and there was nothing in the man's work to produce the disease. The patient did not suffer pain; there was no permanent lesion of the lungs or heart and no hæmaturia.

The nails undergo various alterations in Morvan's disease. Prof. Charcot has devoted a recent clinical lecture ‡ principally to this affection, taking occasion, however, to compare and contrast it with other diseases, such as scleroderma, anæsthetic lepra, and Raynaud's disease, which give rise to mutilating lesions of the fingers. M. Ball has described a variety of scleroderma characterized by the peculiarity that it is limited to the fingers and face. Charcot described to the Biological Society, in 1871, the mutilations which may result from this form of disease and the mechanism by which they are occasioned. The nails become deformed and atrophied. In the latter stages the finger is tipped merely by an almost formless little horny mass, which represents the last remains of the atrophied and deformed nail. In Morvan's disease the nails fall or be-

* *Le Progrès médical*, February 25, 1882.

† *Lancet*.

‡ *De la maladie de Morvan. Le Progrès médical*, March 15 and 22, 1890.

come the seat of more or less marked and fantastic alterations, such as are scarcely met with in any other affection. In some instances they are reduced to small plates of horn which lie upon the stump of the finger.

This disease was first described in 1883 by M. Morvan, under the title of "analgesic paresis with whitlows of the upper extremities." Cases have been subsequently studied by Prouff, Broca, Hanot, Monod and Reboul, Oger, Jürgensen, and others. In M. Broca's case * it is stated that the "nails were not much altered. They were not furrowed, but were slightly curved toward the palmar face, and the anterior face of the free extremity was separated from the phalanx by white, pulverulent epidermic productions which were quite thick." In the case observed by Monod and Reboul † there were trophic troubles of the nails. They were hard, thick, irregular, and presented numerous transverse furrows. Sometimes they are curved in the form of talons. Epidermic exfoliation and eczema are not rare in this disorder.

An interesting case has been published by Dr. S. de Sanctis, ‡ in which necrosis of all the nails of both hands appeared due to lesion of the central nervous system.

The patient, a man forty-five years of age, had suffered from rachitis when a child, and had had small-pox when a youth. Subsequent to the latter illness he was afflicted with nervous paroxysms which were considered epileptic by some physicians, by others as of reflex character due to the irritation of worms. At about the age of twenty, after a nervous attack, the nails of three fingers became necrotic. The nervous malady then disappeared for many years, although, in the mean while, he suffered from very painful cramps in the lower limbs. Seventeen months prior to his falling under the observation of Dr. de Sanctis, the man was ill in bed from digestive disturbances produced by a serious error of diet. During this illness he had a fit of vertigo followed by general tremor and sudden loss of consciousness and severe clonic convulsions. When consciousness returned he felt a vague alarm, although he remembered nothing of the attack. He was weak, pale, and without appetite for several days after this paroxysm. During this time he had hallucinations and was slightly delirious. Recovery took place at the end of fifteen or twenty days. Subsequently the nails of all the fingers of both hands became necrotic. In a short time all the imperfect nails fell, to be presently renewed.

The father, grandparents, and brother of this patient were of deficient mental power. The patient was slight in stature and of feeble constitu-

* Sur un cas de panaris analgésique (de Morvan). Par M. A. Broca, interne, etc. *La France médicale*, 1885, i, p. 785.

† Contribution à l'étude du panaris analgésique (maladie de Morvan). Par C. H. Monod, agrégé, et Reboul, interne. *Archives générales de médecine*, 1888, ii, p. 28.

‡ Sopra un caso di necrosi totale delle unghie in ambedue le mani. Pel Dottore S. de Sanctis. *Sperimentale*, Firenze, 1887, lx, p. 31.

tion. The general nutrition was good, but the sexual functions were imperfect. His gait was peculiar and recalled that of cerebellar ataxia (*titubation vertigineuse* of Duchenne). General sensibility was unimpaired. He had no hallucinations or illusions while in health. The reporter hesitated to affirm positively that the loss of the nails depended upon the nervous disorder, but, in view of the many trophic changes of the skin and its appendages connected with peripheral or central lesions of the nervous system, he thinks it highly probable that this was the fact. Vulpian, Brown-Séquard, Mougeot, and others have studied such cases. Weir Mitchell and Hammond have noted atrophy of the skin accompanied by œdema. Prof. Cantani, in a lecture delivered February 14, 1887, showed a case of alopecia areata symmetrica due to lesions of the anterior gray horns of the spinal cord. The vertigo, oscillating walk, and epileptiform convulsions seem to point to disease of the encephalon, especially of its posterior and lower portion. Prof. Meynert has suggested that the loss of the nails in this case may be of analogous origin to the sanguineous suffusion of the conjunctiva which occurs after epileptic attacks from rupture of vessels. Rupture of the vessels of the matrix and bed of the nails may have taken place with consequent pressure and loss of nutrition.

A case of spontaneous fall of the nails in a hysterical woman has been related by Dr. Falcone.*

The patient, fifty years of age, was born of healthy parents. Her brothers and sisters were healthy. She was married in 1857, and gave birth to three healthy children. She was a well-developed, strong brunette, in disposition neither meek nor irritable. In 1870 she lost one of her children. Her constitution and temperament abruptly changed. She became irritable and sad, and suffered from sharp pain in the head accompanied by vomiting. She began to neglect her duties and abandoned herself entirely to grief. Later she became affected with dyspepsia, colic, diarrhœa, and sensorial and motor disorders. She had transitory paralysis of the lower limbs, wandering hyperæsthesia and paræsthesia, laryngo-pharyngeal difficulty (as cough, sense of constriction, aphonia, globus hystericus), abundant salivation, and profuse sweating of the lower extremities. These symptoms continued for ten years, when they were greatly ameliorated by a long journey which she took at the advice of Prof. Concato. During this period she was subject to a trophic lesion of the hands and feet. In November, 1885, she visited for the first time the grave of her child. Notwithstanding that for six years she had enjoyed comparative health, so vividly was she impressed that the laryngeal phenomena of hysteria reappeared. Aphonia persisted for more than fifteen days, and the cough recurred in a more aggravated form. When she regained her voice she experienced severe formication in the upper and lower limbs. She became very restless, constantly craving movement, excitement, and distraction. One

* Caso di caduta spontanea della unghie in una donna isterica. Qualche considerazione sulla crescita della unghie. Pel Dottore Tebaldo Falcone. Giornale italiano delle malattie veneree e della pelle, 1887, p. 206.

morning her husband noticed that her nails were changed in appearance, being finely rugose and shining. The right thumb nail was particularly affected. Little attention was paid to the nails at the time, but four days later the patient suffered from formication in the fingers, especially the right thumb, and also in both great toes. Observation being drawn anew to the nails, it was seen that the alteration in their structure depended upon a true sanguineous stasis. Suppuration took place beneath the nails, by which they were elevated. There was no decided pain. The suppuration continued after the fall of the nails. It was fetid but not abundant. With loss of the nails all abnormal sensations in the fingers and every sign of altered circulation disappeared. In two months the lost nails were reproduced. At this time the remaining nails became the seat of an active growth and thickening. They also lost their luster. The new nails were properly formed. But in the right thumb proliferation of the cells of the bed took place without any participation of the matrix. Thin and flexible laminae were formed, which subsequently became fused, giving origin to a new corneous formation of very irregular form. The nail appeared to be no more than a thickening of the bed, with a horny metamorphosis which, at the periphery, terminated in a true callous formation corresponding to the matrix. Therefore he inferred that the anterior portion of the nail-bed was concerned with the growth and reproduction of the nail. The patient was eventually cured, but all the new nails were irregular in form and thickness and lacked luster.

An interesting case illustrative of the influence of the central nervous system upon the cutaneous appendages is narrated by Dr. J. Leslie Foley.*

A gentleman camping out upon the shore of Hudson Bay was alarmed by a most violent thunder-storm. On the following morning all his hair and every nail had fallen. They were never reproduced, although every imaginable method was employed in order to stimulate their growth.

In a lecture upon chronic rheumatism † Dr. Lancereaux remarks that in most cases of that disease the nails become furrowed, if not thickened and scaly. After the fortieth year of age he believes that they are thickened in most cases. These alterations are the result of perverted nutrition, and differ in no respect from those observed upon section or irritation of the nerves of the limbs. In an analysis of 208 cases of chronic rheumatism, affecting 132 men and 76 women, this author observed dystrophy of the nail in 80 cases.‡

The nails occasionally fall when no impairment of the general health can be detected. This occurred to the wife of the diabetic farmer to whose case I have already alluded. At about the same time that her husband lost his toe nail she had the same experience, although neither at the time nor for some years afterward was her health impaired.

* The Morbid Changes and Surgery of the Nail. By J. Leslie Foley, M. D., L. R. C. P. Boston Medical and Surgical Journal, 1887, cxvii, p. 301.

† *Annales de thérapeutique médico-chirurgicales*, February, 1890.

‡ *Medical Bulletin*, July, 1890.

A singular case of repeated spontaneous fall of the nails has been described by Dr. Hilbert.* The reporter, a strong and healthy man, was himself the subject.

In September of the year 1880, without any preceding pain or sensation, the nails of both great toes loosened and after some weeks separated. During this period entirely well-formed nails developed beneath the old ones. He at first attributed the occurrence to the fact that he had during the summer taken a difficult mountain tour, and supposed that the local nutrition had been depressed by severe exercise. This idea, however, had to be abandoned, since in September, 1881, precisely the same process occurred although he was unable to indicate any cause. It is a remarkable circumstance that this loss of the nails was repeated in September, 1882, and September, 1883. In September, 1884, the usual order was departed from in so far that only the right toe nail was shed. He had remained perfectly healthy during all this time. The periodicity is a peculiar feature of the case. He was unable to frame any theory as to the origin of the nutritive disturbance.

A similar case has been narrated by Dr. Livius Fürst :†

A girl, five and a half months old, was atrophic from chronic intestinal catarrh. Since the child was six weeks old she had been subject to severe convulsive attacks, in which she lay for hours with her fingers so strongly contracted, her hands so tightly closed, that sometimes for several days at a time they could not be opened in order to be washed. Latterly these attacks had been less frequent. The child was neither syphilitic nor scrofulous. She was well formed, but pale and thin. Nearly all the nails of both hands showed a strongly marked transverse line which divided the nail into two portions. The central portion was smaller than the peripheral. The two differed in level, color, and consistence. The peripheral was somewhat raised above the level of the central piece, was grayer and harder, the central portion being the softer and redder. The nail appeared to be alternately thickened and thinned, so that it presented an undulating surface. It seemed, moreover, as if it were being raised and thrown off by a newly formed nail. This process was repeated four times.

Dr. Fürst ascribed the condition chiefly to the pressure exerted by the contracted fingers, interference with the normal circulation through the finger ends, and consequent impaired nutrition of the nails.

The nails sometimes fall during convalescence from typhoid fever, while in other cases they exhibit alterations due to depressed nutrition during the febrile stage. They are frequently crossed by transverse bands or furrows. That portion which developed during the disease lacks normal thickness, is rough, dull, and white. After typhus fever, also, they are marked by white bands or furrows. They sometimes fall after attacks

* Ein Fall von spontanem wiederholten Nagelwechsel. Von Dr. Richard Hilbert in Tossens. *Memorabilien*, Heilbronn, 1884, p. 462.

† Allgemeiner Fingernagelwechsel bei einem halb jährigen Kinde. Von Dr. Livius Fürst. *Archiv für pathologische anatomie und für klinische Medizin*, 1884, p. 355.

of scarlet fever or small-pox, while in other cases they are channeled by grooves. Similar alterations occasionally occur after fracture or wound of the respective extremity or surgical operation upon the limb, sometimes without apparent disease of the nail or its bed, in other cases consecutive to onychitis. The pustules of small-pox occasionally form beneath the nail. The growth of the nail is retarded during the early stage of fractures and is resumed as repair advances.

Alterations in the nail structure produced by illness have been studied by Beau, Wilson, Wilks, Down, Vogel, and Longstreth. The last-named author, in his paper,* tells us that the earliest allusion to the subject of which he has knowledge occurs in the *Memorabilia Clinicorum* of Reil, who mentions a complete loss of the nails soon after attacks of malignant fevers. Beau directed his attention to the growth of nails in health and disease, and to alterations of structure produced by impaired health. He speaks of seeing a case of acute rheumatism in March, 1846, the subject of which had suffered from a severe typhoid fever during the preceding June. The nails of the great toes only registered any marks of the typhoid fever while all the nails bore evidences of the rheumatism.† Dr. Longstreth began to observe the morbid changes produced in nails in 1869, after his own recovery from an attack of relapsing fever. Vogel's article was published in 1870.‡ A white band upon the nail bore witness to the depressed nutrition caused by the fever. The white band was convex anteriorly and the nail at this situation was brittle and split easily when cut. In cases attended by one relapse, two distinct bands were formed. If a second relapse took place, a third band was produced. Upon careful examination, it was perceived that there was a lack of normal luster in front of each white band, and also behind it, until that part was reached which had developed since the subsidence of the fever. Longstreth observed that at the beginning of a relapse the skin at the root, instead of separating from the nail, remained adherent to it for about the space of one line, covering the horny nail. In sailors, whose hands and nails were altered from the nature of their work, he found that the epiderm did not adhere but cracked and separated around the root of the nail. Beneath this prolonged epidermic layer the nail was rough. Though it had become hard, it had not become smooth, polished, and truly horny. In a case of brain disease, with only slight fever, but profoundly depressed nutrition, the nail exhibited not only white lines, but also had a deep furrow. White streaks and furrows are the results of the same process,

* On Changes in the Nails in Fever and especially in Relapsing Fever. By Morris Longstreth, M. D. Transactions of the College of Physicians of Philadelphia, 3d Series, vol. iii, 1877, p. 113.

† Beau, *Archives générales de médecine*, 4 sér., xi, 1846, p. 447.

‡ Vogel, *Die Nagel nach fieberhaften Krankheiten*.

the different appearances being merely differences of degree in the nutritive alterations and disturbances. The white line is the least evidence of such depression. The cells of the rete Malpighii in the fold and at the root of the nail are checked in their growth and never reach perfection.

Prof. J. M. DaCosta, in the same volume of Transactions, communicates some "Remarks on Relapses in Typhoid Fever." He cites the case of a boy who was admitted to the Pennsylvania Hospital with a doubtful and unsatisfactory history. The case was a grave one, bearing some resemblance to one of brain trouble, although it was thought to be typhoid fever. About half-way up the nail there was a white line of impaired nutrition, evidently from a former attack; near the root another white line and a furrow were developing, due to the relapse. When the boy recovered he confirmed the observations by stating that he had had an attack of typhoid fever not long before admission. Here the study of nail growth proved valuable. It gave the full clew to the case.

(To be continued.)

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

199TH REGULAR MEETING.

DR. G. T. JACKSON, *President, in the Chair.*

Melanosis.—DR. PIFFARD presented a case of this affection in a colored man forty-six years of age. He had had a number of pigmented moles on the body for some time, but the melanotic tumors, which are three or four in number, situated just above and to the outer side of the right ankle, made their appearance about a year ago. The tumors vary in size from a pea to a half-dollar, are deeply pigmented, and the largest one has a rough, scaly surface. The man has a small keloid growth just below these tumors on the right ankle, and a very large one running transverse across the front of the chest.

DR. ALLEN said that he thought the case presented by Dr. Piffard was lichen planus, occurring in a subject having a tendency toward the formation of keloid tumors.

DR. FORDYCE diagnosticated the case as lichen planus.

DR. BRONSON said that the case presented the usual clinical features of lichen planus, especially as to the presence of elevated, horny patches, and to the amount of itching present.

DR. FOX considered the case one of lichen planus.

DR. TAYLOR had no doubt in his own mind that the disease was lichen planus. The deep pigmentation was not unusual in patches of lichen planus.

occurring about the ankle, even in white persons. The epidermal hypertrophy and itching were characteristic features of the disease.

DR. PIFFARD concluded by saying that the microscope would aid very much in making a positive diagnosis. If pigment was found in abundance distributed in the derma, not in the pigment cells, the diagnosis would point toward melanosis.

Keloid resembling Kaposi's Disease, "Dermatitis Papillomatosa."—DR. FOX presented a case of keloid tumors of the back of the neck, with the following history: The patient was a negro aged twenty-four. Growth began spontaneously on the occiput nine years ago. There were five distinct tumors, the largest of which was excised, leaving at present a varied cicatrix. A number of small, hard follicular nodules were seen around the tumors, some perforated by hairs, and the patient stated that matter had at times oozed from there. On the neck below either angle of the jaw were numerous shotty papular growths.

DR. KLOTZ said that the papules on the face and neck he did not think were keloidal, nor did he think the disease was an example of one described by Kaposi as dermatitis papillomatosa.

DR. PIFFARD said the case was one of secondary keloid. Keloidal tumors frequently had their origin in some open lesion of the skin, especially common in the negro or mulatto.

DR. BRONSON said that he agreed with Dr. Piffard in his remarks, and thought that the keloidal condition of the case presented was entirely secondary in origin, and not an example of Kaposi's disease.

DR. TAYLOR said that Kaposi's disease looked so much like vegetating syphilide of the scalp that it was often a difficult matter to diagnosticate between them. It was an inflammatory disease with production of warty growths, often accompanied with an exudation, matting the hair together.

DR. FOX concluded by saying that he considered Kaposi's disease a form of keloid. That Dr. Heitzman had examined the two diseases carefully under the microscope, and pronounced them of the same nature, if not identical.

Syphilitic Seborrhœal Eczema.—DR. CUTLER presented a case of syphilitic seborrhœal eczema, with the following history: M. R., aged twenty-two years, a native of Ireland. Patient had gonorrhœa a number of times, but until six months ago had never had a venereal sore. At that time a sore appeared on the glans penis, which took about a month to heal. One month after the sore appeared on the glans penis a number of lesions similar to those now on the body appeared on the scrotum and abdomen, enlarged glands came in the neck and groin, sores on his throat and tongue, and scabs in his hair. At this time he began treatment at one of the hospitals in the city for syphilis, but, according to his own statement, his condition did not improve. Some of the lesions now on his body have remained the same for months, a few have disappeared leaving a deep pigmentation, and new ones have formed from time to time. The character of all these lesions, he says, has been the same, and they have been associated with considerable itching, especially at night. Each lesion began as a little red elevation on the skin, which gradually increased until they reached the size of a ten-cent piece, round or oval in shape. These lesions would secrete a semi-transparent fluid

which, drying on the surface, would form a yellowish crust, looking as though it was stuck on, and when removed would leave a slightly excoriated, moist surface. The lesions on the body and extremities have been discrete, most numerous on the back, and with little tendency to group or to form in circles. Those on the forehead first made their appearance in small, discrete circles which, spreading peripherally, have run together, producing a large patch with an irregular curved outline, elevated and composed of small papules. This patch is now dark-red in color, and covered with a sticky, yellowish crust easily removed, leaving a slightly excoriated surface. The crusting is most marked about the edges of the patch, although the center is not free from it. The eyebrows are especially affected with crusting. There has been no ulceration in any of the lesions except on the legs, which the patient thinks was caused by scratching.

Neuroma.—DR. BRONSON presented a patient with painful neuroma of the skin. The patient was a man seventy-six years of age. At about the middle of the anterior surface of the leg, and midway between the crest of the tibia and the fibula, was a little rounded tumor, about the size of a large pea, rising sharply from the otherwise normal-looking skin to the height of about a quarter or fifth of an inch at its central point. It was of a pinkish color, the surface was smooth and shining, and to the touch it was firm and elastic. It was freely movable with the skin in which it was imbedded. When firm pressure was made upon it, it was painful, and if the pressure was increased it soon became intolerable. Five years ago the patient had first noticed a little tubercle (or "wart" he called it), which grew rapidly larger. For two or three years no sensations whatever were noticed in connection with it. About two years ago slight twinges of pain began to be felt at the site of this little tumor. They were of a pricking character. At first they were slight and not frequent, occurring perhaps once or twice a day. But of late, for a year or so, they have grown much worse, and have become more frequent. They are most apt to occur early in the morning, often waking the patient out of sleep. They then last for an hour or two, when they slowly disappear. Sometimes they are intense. During the daytime they also occur every now and then, but are less severe and easily tolerated. The pain is paroxysmal, and is said by the patient to resemble the sensations that would be produced by repeated thrusts into the skin of a pointed instrument. Usually it is closely limited to the seat of its tubercle or tumor or its immediate vicinity, though at times it seems to course up and down the leg. The patient had thus far refused an operation. A singular circumstance in connection with this case was that on the same day that the patient presented himself at the Polyclinic another patient, an elderly woman, came with the same affection. Barring the fact that in the woman's case the little tumor was upon the lower part of the thigh instead of upon the leg, one case, both in history and clinical features, was almost precisely the counterpart of the other. It was regretted that it had not been possible to present the two cases together.

Colloid Milium.—DR. FOX presented a case of colloid milium, or disseminated lupus of the face, with the following history: The patient was a man aged thirty-two. The eruption appeared suddenly about ten years ago. The lesions were rounded nodules, mostly discrete, and at first glance sug-

gestive of tubercular syphilide. They are soft like lupus tissue, and a probe is easily pressed through the corium. A curette reveals a globular, glutinous mass, and its use is followed by considerable hæmorrhage.

Cavernous Tumors.—DR. FORDYCE presented a case of cavernous tumors in a child. (See June number of JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.)

Psoriasis following Syphilis.—DR. TAYLOR read a paper on **Interesting Cases,*** and presented a case of psoriasis following syphilis.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Action of Aristol upon Affections of the Skin.—Since the date of my last letter I have continued to make experiments with aristol, and here are some new results I have obtained.

In chancroid its employment does not seem to exert a favorable modification of the virulence of the disease. In almost all other cutaneous ulcerations it acts only as a simple cicatrizing.

In tertiary syphilitic ulcerations it seems to really render active the process of cicatrization, provided that an appropriate general treatment with mercury and iodide of potassium be instituted.

In tuberculous ulcerations of the skin it possesses marked cicatrizing properties, as I have pointed out in my last letter. But applied as a topic upon non-ulcerated lupus vulgaris or erythematous lupus, it exercises no useful effect, as I have already indicated. In tubercular ulcerations of the mucous membranes I have obtained good results; it favorably modifies the aspect of the affection, and I have effected by its employment the cicatrization of a profound and extensive tubercular ulceration of the arch of the palate. I have never observed toxic accidents from its use. In superficial epitheliomas it appears to exercise no selective destructive action upon epitheliomatous tissues. But where the neoplastic products have been destroyed by caustics, by curetting, or by the hot iron, it gives rapid cicatrization. So that it is now my practice, in presence of a superficial epithelioma, to thoroughly curette the base so as to remove as much as possible of the morbid tissue; if I think the raglage sufficient, I immediately dress it with aristol in powder; if I think that all the neoplasm has not been destroyed by the curette, I dress the wound either with chlorate of potash in powder for two or three days, or with absorbent cotton dipped in a concentrated solution of the chlorate of potash for five or six days in order that this substance may act upon the roots of the disease; then I employ the powdered aristol until cicatrization is effected.

In psoriasis, the employment of aristol in the form of a pellicle or of a 10-per-cent. ointment has given me scarcely appreciable results. It has been

* Will be published in this Journal.

my custom to treat one side of the body with the preparation of aristol, the other side with a medicament the action of which upon psoriasis is well known; as, for example, the oil of cade or the emplastrum de Vigo; now, while the surface treated with aristol shows scarcely any modification, that treated with the other preparation improves from day to day.

Treatment of Scabies.—In my former letters I have called attention to various methods employed in France for the treatment of scabies in private practice. I have spoken of the very convenient and practicable treatment by petroleum. The rapid method of treatment employed at the Hôpital St. Louis, commonly termed *la frotte*, which cures the itch in an hour and a half, is well known. This rapid treatment is exceedingly irritable, and can scarcely be utilized in the case of children and in persons whose skin is irritated and presents numerous lesions. In this class of persons Messrs. Vidal and Fournier recommend the employment of a mixture of two parts of styrax with one part of olive-oil; with this preparation two frictions are made—one in the morning and one at night. I think it preferable to employ a mixture of twenty parts of oil and ten parts of styrax, and one or two parts of balsam of Peru. In the great majority of cases these applications are admirably well borne by the most irritable skins, even by infants at the breast. Under its use the itching ceases, the eruption gradually disappears, even when it presents a markedly inflammatory character. Nevertheless, one must distrust this application somewhat; quite recently I had occasion to order daily frictions of the above mixture in the case of an eczematous young man suffering from scabies, and in forty-eight hours there developed an intense artificial eruption, characterized by a most vivid redness, a marked tumefaction of the integument, with an innumerable quantity of small vesico-pustules. It is probable that the substances which entered into the composition of the ointment were adulterated, since it is the only time in ten years' experience that I have observed an artificial eruption in a patient with scabies treated with styrax.

Nature and Treatment of Impetigo.—Dr. W. Dubreuilh has just published in the *Annales de Dermatologie* an article upon this subject. I have already made known to your readers the views of the French school upon these points. We no longer adopt in Paris the opinion of Professor Hardy that impetigo should enter into the category of eczema. For us impetigo is an affection *sui generis*, definitely characterized by its vesico-pustular aspect, by its evolution, by its auto-inoculability, and its non-inoculability to a healthy individual. It sometimes complicates eczema, but it may exist alone and follow its complete evolution as an impetigo without being complicated by an eczematous eruption.

These ideas, long held in honor at the Hôpital St. Louis, have been newly sustained by Dr. Dubreuilh. He believes that the intra-epidermic inoculations of any kind of pus may give rise to impetigo. Still one can not find in the suppurative focus the origin of this dermatosis; but then its genesis is explained by the fact that we frequently find the *Staphylococci pyogenes* upon the surface of the healthy skin, and in the dust which surrounds us. The question of the terrain still remains the most important, since the same causes may act upon many individuals without determining in all eruptions of impetigo. In fine, impetigo appears to the author "to be an entity, perfectly de-

terminate from a clinical point of view by its superficial pustule containing a quantity of viscous pus, which dries in thick and honey-like crusts, as well as by its contagiousness, while there is no ætiological specificity, it being due simply to an inoculation under certain conditions of pyogenic microbes of whatever origin.

"We can not distinguish a contagious impetigo as a special form; there is but one impetigo—the impetigo vulgaris—which is contagious."

In Dr. Dubreuilh's opinion, eethyma is only an irritated impetigo, inflamed by the sanguineous stasis, by the friction of the clothing, by traumatisms of every sort, and favored by dirt and often by a cachectic state.

The following is the method which he recommends for the treatment of this affection: The capital point, he says, is to detach the crusts and prevent their reformation. The first indication may be filled by poultices or by ointments; the second, by applying them frequently and in great abundance, so that the surface of the skin may not be allowed to become dry. Thus he advises that the diseased surface should be smeared twice daily with a layer of the topic sufficiently thick and covered with linen smeared with the same ointment, and retained in position by a suitable bandage. As an ointment he recommends vaseline and lard, each 50 grammes; oxide of zinc, 20 grammes; salicylic acid, 2 grammes; acetate of lead, crystallized, 1 gramme. Each time the application is renewed it is well to cleanse the diseased surface by gently wiping it rather than by washing, and to lift up the crusts which may have accumulated. In my former letters the method of treatment by borated and mercurial preparations which I have recommended for impetigo has been described.

Lingual Manifestations of Syphilis.—Professor Fournier has devoted a series of lectures at the Hôpital St. Louis to a clinical study of syphilis of the tongue. After calling attention to the comparative rarity of lingual chancre, which in his private practice he had encountered only thirty-seven times in twenty-seven years, he describes the clinical aspect and course of the primary sore in this region. Its principal seat is on the anterior half of the organ; nevertheless, it has been observed at the niveau of the lingual V. It may take on the ulcerous form, but much oftener it is simply erosive. The bubo develops in the region of the lateral subhyoidean or submaxillary glands; sometimes it is seated just behind the chin, when the chancre occupies the point of the tongue.

The secondary lesions form two distinct groups—the *moist* and *dry* syphilides—the former being by far the most frequent.

The *erosive type* of moist syphilide is quite common, few syphilitics escaping this manifestation. Most generally there are several crops; in some cases ten, fifteen, twenty, or thirty even. They present the aspect of superficial, lenticular, flattened erosions, of a dark-red, sometimes of a grayish or diphtheroid, coloration. They have a smooth appearance, contrasting with the villous, downy aspect of the normal surface of the tongue. Mucous patches may be single or multiple, in the latter case frequently covering quite an extensive surface. Upon the sides of the tongue they may assume the form of fissures or rhagades, showing as small lesions perpendicular to the axis of the tongue. While these erosive syphilides are trifling lesions without local

importance, they possess considerable significance from the point of view of their contagiousness; they are most frequently the cause of contamination from the husband to the wife.

Two points of importance are especially to be insisted upon. In the first place, these secondary erosions present no special characters; they may resemble any simple lesion. There is no single sign which serves to differentiate a mucous patch from an ordinary lesion—such, for example, as the erosion of aphthæ. In the next place, these lesions may be exceedingly minute, no larger than the head of a pin; they may lose their customary color, and thus pass entirely unperceived; nevertheless, it is of the utmost importance that they should be discovered, since, when a man demands whether he be contagious, it is absolutely necessary to make no mistake in the response given him.

The *papular type* of moist syphilide is more rare upon the tongue, and presents no essential differences from the papule in other regions. It forms small pastilles over the tongue, slightly elevated, and generally of a rosy or reddish color. Sometimes they are whitish, and assume a diphtheroid aspect. Ordinarily they occur on the dorsal surface, exceptionally on the inferior aspect, of the tongue. Sometimes they become confluent, forming a papular nappe. Abandoned to themselves, they may become confluent, forming reddish or whitish plaques, giving to the tongue a peculiar aspect, which has been compared to the back of a toad.

In the *ulcerous type* the ulcerations are without special characters, regularly or irregularly rounded or oval, presenting no objective features by which they can be recognized. The diagnosis must be based upon a thorough examination of the patient and an inquiry into his history.

The second group comprises the dry syphilides which have received different names: *glossite depapillante ou tonsurante*, *lingual psoriasis*, etc. They form small, quite distinct islets or patches, presenting a smooth aspect, due to the disappearance of the papillæ, the surface appearing as if shaven. This smooth aspect is only clearly visible when the surface of the tongue has been cleared of the saliva and wiped dry with a towel. The surface of the syphilide is then seen to be perfectly smooth, and does not change its color when touched with a crayon of nitrate of silver. There is no trace of erosion. This glossite tonsurans is, moreover, remarkable by another characteristic; its development bears no relation to the age of the diathesis; it may occur in the first few months of syphilis, or it may be met with six, eight, or ten years later.

In regard to the *diagnosis* of secondary syphilides of the tongue, they may be confounded with many other lesions of this organ—such as aphthæ, smokers' glossitis, dental glossitis, etc. Particular attention is directed to one eruption of great practical importance of which no mention is made in classic treatises—viz., *the recurrent buccal herpes of syphilitics*. This eruption generally presents itself as follows: A patient, whose syphilis dates from four or five years, who has been treated methodically and apparently cured, becomes affected with small erosions upon the tongue. These erosions are minute, flat, and resemble absolutely mucous patches. The lesions disappear, but a month or six weeks later they reappear, and this may continue

during months or years, even when the patient is subjected to mercurial treatment. Their non-syphilitic character is demonstrated by the inefficacy of specific treatment. These recurring erosions are absolutely analogous to the *recurrent genital herpes* described by Doyon. They develop principally upon the tongue, but also upon the lips and cheeks. The excoriations are superficial, small, and habitually multiple. They are of short duration, whether treated or not, usually healing in from eight days, or perhaps not until fifteen days, if the patient irritates them by smoking. Their identity with herpes is completed by their configuration, which is at the same time microcyclic and polycyclic. Further analogies between buccal and genital herpes are found in their course, their incessant recurrences, and their causes; genital herpes succeeds to causes of excitation, venereal diseases of the penis, blennorrhagia, simple chancre, etc.: buccal herpes is also under the influence of irritant agents which act upon the mouth—such as syphilis, tobacco, mercurial treatment, etc. If the nature of the disease be unrecognized and mercurial treatment be pushed, pernicious effects result.

The *treatment* of secondary syphilides of the tongue is both local and general. Mercurial treatment alone may succeed in curing buccal mucous patches, but a long time is necessary to obtain this result; it is much better to have recourse concurrently to topics. Among these the author especially recommends the acid nitrate of mercury, which is painful but most efficacious, and the nitrate of silver. It is necessary also to maintain the mouth in a perfect state of cleanliness; to abstain from tobacco, alcohol, etc. The patient should make use of the following collutory: Miel rosat. et glycerin, āā 10 grammes; borax, 3 grammes. (My practice is to employ the following treatment for patients affected with buccal and guttural syphilides: 1. I cauterize the patches every five or six days with nitrate of silver, or in rebellious cases with the acid nitrate of mercury. 2. Patients are ordered to rub the gums with a powder composed of pulverized quinquina and powdered charcoal, āā 10 grammes, and powdered rhatany, 5 grammes, several times a day. 3. They must rinse the mouth and gargle with the eau de Vichy or with a concentrated solution of chlorate of potassium several times daily. 4. They must use each day a number of pastilles of borate of soda. 5. If necessary, a solution of the sublimate (1 to 2,000) is employed once a day as a gargle. 6. Finally, the lesions are touched every day or two with a brush dipped in the following collutory: Iodine, 25 centigrammes; iodide of potassium, 50 centigrammes; neutral glycerin, pure, 20 grammes. The patient is enjoined from smoking and the use of highly-spiced and stimulating aliments; finally, the digestive functions are to be perfectly regulated.)

The *tertiary manifestations* of syphilis are frequent upon the tongue. Fournier's statistics give a proportion of 192 cases of tertiary lingual lesions for 987 cases of cutaneous tertiary lesions. They are much more frequent in men than in women, as will be readily understood from the fact that the chief ætiological factors are first of all tobacco, then alcohol.

The author divides sclerous glossitis into two principal groups: (*a*) *superficial cortical glossitis*, which is revealed by the presence of surfaces firm to the touch, the mucous membrane dark-red, smooth, thin, without papillæ; (*b*) *deep parenchymatous glossitis*, which presents four principal characters—

tumefaction, mammillation, profound induration of the organ and alteration of the mucous membrane. These lesions are extremely rebellious to all medication; specific treatment can accomplish nothing against this sclerosis, which behaves as an embryonic infiltration, not having undergone transformation into fibrous tissue.

(Even when sclerosis is alone present, the tongue sometimes becomes sensitive and painful to certain movements; it rapidly tumefies in a few days, a few hours even, by an access, so to speak; in my opinion, these accidents are governed by two ætiological conditions—the arthritism of the patients and their bad gastric state. It seems that veritable rheumatic or gouty crises are produced in the tongue, which has become, on account of the syphilis, the *locus minoris resistentie* of the economy. Thus too we know how all the disorders of the stomach react upon the primary digestive tracts. In these cases I believe it necessary to direct treatment especially to the general constitution of the patient, and to produce the perfect function of the digestive tract by appropriate regimen. As regards local treatment, frequent washing with boric-acid water, with solutions of borate and bicarbonate of soda, prolonged baths of the buccal mucous membrane with the same substances, and small doses of the iodide internally, have given me good results.)

The *gummatous glossitis* may be either *superficial* or *deep*. Professor Fournier has studied with some detail two quite special forms: the *confluent form*, in which the number of the gummata is sufficiently considerable to deform the organ and sometimes even to give it such dimensions that it can not be contained within the buccal cavity; the *phagedenic form* is much more rare, and which comprehends two subvarieties—the *serpiginous variety*,—which generally progresses backward and which may determine œdema of the glottis, and the *terebrant variety*, which may result in the destruction of the quarter or half of the tongue.

The prognosis of gummatous glossitis is much less grave than that of sclerous glossitis, since it is amenable to appropriate treatment. Iodide of potassium may alone cure gummatous glossitis, while in the sclerous forms mercury is indispensable; it is especially useful in these cases in the form of frictions.

Professor Fournier strongly recommends that no irritant aliment should be used, and only those culinary preparations requiring the least possible trituration.

The patient should employ emollients as a topic, or an iodo-iodureted solution, containing in each 250 grammes of water, 2 or 3 grammes of iodide of potassium, and 40 drops of tincture of iodine; with this two or three pulverizations, each lasting ten or fifteen minutes, are made each day.

In sclerous glossitis cauterizations with the pointed stick of nitrate of silver are useful where fissures or rhagades exist; these may be repeated every four or five days. In the gummatous fissure it is well to cauterize the base of the lesion with tincture of iodine when the gummatous eschar is eliminated; then, when the surface becomes granulating, it is touched with the nitrate of silver. In all the other cases of glossitis it is necessary to guard against the employment of caustics.

Pleurisy in the Roseolic Stage of Syphilis.—Doctors Chantemesse and

Widal have quite recently published two cases in which it seems to be demonstrated that syphilis in its secondary period may determine lesions of the articular serous membranes; it may produce simply pleural frictions denoting a dry pleurisy, or an effusion of little importance. These manifestations are amenable to the ordinary treatment of syphilis.

Retarded Syphilis.—Dr. E. Besnier has insisted quite recently in his clinics upon a fact quite common but of great practical importance. Three months previously a young man presented himself for consultation at the hospital with an indurated lesion of the lip having all the characters of syphilitic chancre, accompanied with a retromaxillary adenopathy, which confirmed the diagnosis. Nevertheless, the patient would not admit that he could be syphilitic, for he contended that he had not been exposed to any contamination. The treatment was postponed in order to convince him by the appearance of secondary phenomena; now, at the end of three months' observation, nothing yet has been developed.

The conduct of such a case is most delicate; a diagnosis of syphilis seems indubitable, and we know that sometimes roseola may not manifest itself until quite late: it may be retarded until the sixth month, as Ricord has demonstrated. We know also that a chancre having all the characters of a syphilitic chancre may never be followed by general accidents. Should we nevertheless institute a specific treatment, or await the development of other symptoms denoting a general infection of the economy? Dr. Besnier believes that this latter practice should be adopted only in the presence of really doubtful cases.

DR. L. BROcq.

PARIS, August 1, 1890.

DERMATOLOGY AND SYPHILOGRAPHY IN GREAT BRITAIN.

(Continued from page 323.)

Hydroa Vacciniforme.—Dr. Handford, of Nottingham, has described in the *Illustrated Medical News* (October 12, 1889) under the above name a case of a disease first described by Bazin, which has somewhat puzzled other dermatological writers. The French author described an eruption appearing after exposure to wind or hot sun, especially on the exposed parts of the body, but sometimes on other parts, and on the buccal mucous membrane. After a little malaise the eruption comes out in the form of red patches on which are formed vesicles resembling those of herpes. On the second day the vesicles become umbilicated and soon covered with a crust, which, when it falls off, leaves a depressed cicatrix. These scars, numerous and covering the surface of the body, suggest the previous occurrence of small-pox. The disease is prolonged by numerous successive attacks for months (or even years). It is sometimes accompanied by arthritic symptoms (Bazin, *Affections génériques de la peau*, 1862, and elsewhere).

Dr. Handford's case was that of a rather delicate boy, aged seven, who had been subject since he was two years old to an eruption coming out in a series of crops for four or five months every year, generally from April to September.

The eruption is generally confined to the face and neck, but rarely appears on the backs of the hands and forearms. The ears are generally specially affected. Each attack is brought out by the heat of the sun or sometimes by cold winds, and often within a few hours after exposure. The eruption begins in the form of pin-head papules, each surrounded by a small areola, which speedily become vesicular or pustular, and in twenty-four hours attain the size of a split pea. On the third day they dry up in the center and become umbilicated, so as exactly to resemble vaccine vesicles, and when incised allow a little serum or pus to escape, without completely collapsing, showing that there are dissepiments, as in variola. By the third or fourth day the center is of a dark-red color, and the vesicles gradually dry up, forming a scab, which falls off from the fifth to the seventh day or later, leaving a whitish pitted cicatrix. Many of the vesicles become confluent, forming large bullae, which dry up into thick scabs. There is considerable itching and some pain, and sometimes during the purulent stage considerable swelling of the face occurs. Some micrococci were found in the purulent vesicles, but not in those which were simply serous.

The patient has been watched through four summers, and each year a similar course of events has repeated itself. The last year a keloid cicatricial band has formed across one cheek.

No curative treatment has been found.

The author compares this affection not only to Bazin's vacciniiform hydroa, but to a case described by Mr. Jonathan Hutchinson as "a form of disease allied to Kaposi's disease and to prurigo æstivalis adolescentium" (Clinical Society of London, December 14, 1888; reported in this Journal).

[The reporter has quoted this case, which is illustrated with a colored plate, from the Illustrated Medical News at some length, because that journal has unfortunately ceased to appear, and the account can not therefore be easily referred to. It appears to be an instance of what Bazin described under the name above given, and to be, at all events, closely allied to Hutchinson's prurigo adolescentium, though presenting a much more severe type of disease.]

Feigned Skin Diseases.—Dr. Coleott Fox has published (Illustrated Medical News, November 2, 1889) a clinical lecture on this subject, with some curious cases of lesions produced either by the application of irritants and escharotics, or by rubbing, pinching, scratching with the nails, etc. The patients were all women or girls of neurotic or hysterical temperament, whose motive would sometimes be to attract attention or sympathy, but in many cases there was no distinct motive; only a morbid state of mind.

A case of artificial urticaria in a precocious little girl, ten years old, gave some trouble till it was noticed that the lesions were all on the front of the body or face, were oval patches rather broader than the finger, and were often excoriated. Moreover, the arrangement of the patches was peculiar. The direction of the long axis of each patch was *transverse* on the chest and abdomen, oblique on the right shoulder, longitudinal on the legs; in fact, such as might be expected if the patches were induced by rubbing, and unlike anything observed in true skin diseases. Finally the child was detected producing a wheal on the abdomen.

There was undoubtedly an urticarial element in the case, and Dr. Fox found that he could himself produce a wheal on the child's skin by rubbing; but when the matter was explained to the mother and she took the case in hand, the eruption at once ceased.

Erythema is a disease often simulated by the feigned eruptions, but the latter are distinguishable by the irregular shape of the lesions, by their more frequent occurrence on the front of the body, on situations accessible to manipulation, and often with a marked preponderance on the *left* side. There is usually an absence of symmetry unless the patient's attention has been called to this point, after which symmetrical lesions are likely to appear.

A case is given of a girl, aged fourteen, who had been for three years attending several hospitals as an out-patient, who presented oval excoriated patches in several parts, among others on the front of the left arm. The fact that the excoriations appeared only at night, their shape, distribution, and other features of the case, made it clear that the disease was feigned, though the mother, an over-anxious and silly woman, was absolutely incredulous.

Another class of cases is that of apparently incurable ulcers produced by escharotics or by persistent scratching.

A girl, aged nineteen, suffered from peculiar ulcers of the back of the left hand. They were treated and nearly healed, when they would suddenly break down again in the night, with manifestations of severe pain on the part of the patient. Ultimately, when packed with iodoform and well covered up, while at the same time suggestions of a severe operation being necessary were made, they rapidly got well.

Numerous other cases, recorded by other writers, are also quoted, and several figures of feigned eruptions are given.

Hæmorrhagic Purpura, or Urticaria.—Dr. Saundby describes, under the name of "urticaria hæmorrhagica," two cases of purpura accompanied with much swelling. Both patients were females—one aged twenty-four, the other fourteen.

The first patient had been insufficiently nourished for some time, and gave a family history of rheumatism. She was suddenly attacked with a sore throat, followed by swelling of several joints and red elevated patches on the skin, which were accompanied by diffuse swelling, and changed color like bruises. The swelling of each joint and the hæmorrhagic patches lasted about two days. She was brought into hospital suffering from extreme dyspnoea, which proved to be due to an œdematous condition of the soft palate, uvula, and tonsils, the vocal cords being unaffected. The face was also swollen, and hæmorrhagic patches continued to appear on various parts of the body for some days. The gums were also tender. The temperature at one time rose to 103.8° F. The attack lasted about a fortnight and the patient left the hospital, but was readmitted with dry pleurisy on one side.

In the second case the purpuric eruption followed an attack of tonsillitis. The hæmorrhagic spots were confined to the limbs, and were chiefly on the legs: hard, raised, purplish-red in color, varying in size from that of a pea to three quarters of an inch in diameter. Both legs, and afterward both hands, were swollen and tender, but not œdematous. The joints were tender,

but there was no effusion in them. The temperature hardly exceeded 100° F. The attack lasted about three weeks, when the child was discharged quite well.

[The reporter calls these cases purpura, and not urticaria, as Dr. Saundby does, because each patch of eruption lasted two or more days, and was followed by the changes of color characteristic of purpura, while urticarial lesions are more evanescent. The eruption in both cases was accompanied by tonsillitis and joint affections resembling rheumatism, which certainly often accompany purpura.]

Herpes Zoster.—Dr. Gibbs Blake describes a case of herpes zoster affecting the foot, both on the dorsal and plantar aspects. As in some other cases, the author found a difficulty in limiting the distribution of the eruption to any one cutaneous nerve. On the contrary, it invaded the area supplied by the internal saphenous proceeding from the lumbar plexus, and also that supplied by the posterior tibial, external saphenous, and musculo-cutaneous nerves from the sacral plexus. This anomaly the author explains by supposing that an irregular nerve-supply existed, or that there were communicating branches between the musculo-cutaneous and internal saphenous.

It is certain that similar difficulties may often be found in referring the distribution of herpes zoster to special cutaneous nerves, and the most probable explanation—if herpes is necessarily a nerve disease—is that cutaneous nerves are more irregularly distributed than is generally recognized in anatomical text-books (Birmingham Medical Review, December, 1889).

Consequences of suppressing Eczema.—Mr. H. G. Brooke, of Manchester (Medical Chronicle, December, 1889), writes on Accidents arising from the Suppression of Eczematous Eruptions. He thinks that Hebra's denial of the possibility of internal inflammations being brought on by the cure of an eczematous eruption was much too absolute, and that cases do occur in which ill health follows the suppression of an eruption and disappears when the eruption breaks out again.

The connection between eczema and bronchitis, or what is called asthma, has been dwelt upon by numerous observers. Brooke has seen in some cases the attacks of the skin and of the lungs alternate regularly. But in other cases the two affections may arise and decline together. For instance, a healthy and robust infant was brought to the hospital suffering from extensive eczema of the head and face. Local treatment healed up the eruption in five days; but, on the day following the disappearance of the eczema, the child had a sharp attack of bronchitis. The bronchial symptoms completely disappeared after two days, but the eczema at once broke out afresh. Another case was that of a boy, ten years old, in whom attacks of eczema and asthma had alternated since childhood. In a third case, that of a lady aged thirty-two, who had suffered since childhood from eczema of the right hand, whenever this was cured she complained of vague ill health and ill-defined rheumatic pains. Besides these cases, the author refers to others recorded in medical literature, and especially to a paper by L. Brocq, published in the British Journal of Dermatology, February, 1889. He admits that only in a very small percentage of those affected with eczema do any internal complications follow on its suppression, and the liability to such results

depends on the idiosyncrasy of the patient. This consideration need not therefore, in the first instance, influence our treatment.

Some of the Rarer Effects of Pediculi.—Dr. Allan Jamieson has described in the *British Journal of Dermatology* certain local and reflex effects produced in some cases by pediculi.

The local effects are: 1. *Maculæ cæruleæ*. 2. Pigmentation. The reflex effects are: 1. The presence or absence of itching. 2. Pyrexia.

1. The *maculæ cæruleæ*, or *taches bleuâtres*, are stains of a steel-gray tint, varying in size from that of a pea to that of a finger-nail, occasionally found on the trunk or on the inner aspects of the thigh and upper arm, which have sometimes been imagined to be characteristic of fever, but were shown in 1868 by Falot and Mourson to be produced by the *pediculus pubis*. Duquet, in 1882-'83, produced them artificially by puncturing the skin with a lancet armed with a paste prepared by bruising the pediculi with water. They must therefore be regarded as the pathognomonic indication of the presence of the crab-louse. In a girl, aged twenty-three, admitted to an Edinburgh hospital for an affection of the throat, the body was found to be swarming with crab-lice, which, strange to say, had caused no irritation, and numerous *maculæ cæruleæ* were found. Other cases are referred to.

2. Brown pigmentation is well known to be an occasional result of the scratching induced by the irritation of *pediculi corporis* (or *vestimentorum*), and in a case described by Dr. Jamieson the color thus produced was almost black—nearly as dark as the integument of a negro.

The reflex phenomenon of itching, which is the rule when pediculi are present on the body, is sometimes strangely absent, especially, Dr. Jamieson thinks, in those persons who show *maculæ cæruleæ*.

Pyrexia is the most interesting, though least known, of the phenomena due to pediculi. A well-marked instance occurred in a girl, aged fourteen, who, on admission to the hospital, was found to have an axillary temperature of 103° F., and to be covered with *pediculi corporis*. No sooner was she freed from parasites than the temperature became normal. In another case a healthy young man of nineteen was admitted on two occasions to the hospital in a state of high fever, the temperature on one occasion being 106·2° F.; on another, 106·4° F. He was found to have *pediculi corporis* in immense numbers, and the temperature fell on both occasions at once to normal after a bath and a change of linen. In other respects his condition was normal, and there was no inflammation of the skin. The pyrexia seemed therefore entirely due to peripheral irritation, and hence reflex.

J. F. PAYNE.

Cystitis as a Complication of Diabetes.—Dr. Richard Schmitz (*Berliner klin. Wochenschrift*, June 9, 1890) calls attention to a hitherto little noticed complication of diabetes which may occur both in a chronic and acute form.

The cystitis owes its existence to the fermentation of urine, and may be started by some local condition causing undue retention. Once developed, its existence is prolonged by the diabetic urine. Cases have come under the author's observation where the cystitis had been treated for a long time without the primary trouble having been recognized.

Selections.

Extragenital Chancres.

IN a previous number of this Journal there was given an analysis of all cases of extragenital syphilitic infection observed in the service of Professor Fournier, Hôpital St. Louis, to February, 1888. Dr. Veslin gives in the April number, 1890, of the *Annales de dermatol. et de syphilig.* a *résumé* of all cases of extragenital chancre in Fournier's service from February, 1888, to February, 1889, and Dr. Feulard, in the same number, completes the record up to February, 1890. Dr. Veslin's statistics embraces a series of twenty-six chancres, situated as follows:

Cephalic Chancres.	{ Lower lip	9
	{ Tonsil	4
	{ Tongue.	2
	{ Upper lip.	1
	{ Eyelid.	1
Total		17
Chancres of the Trunk. {	Breast.	2
	Umbilicus.	1
	Abdomen.	1
Total		4
Chancres of the limbs.		1
Chancres of the anus.		4

Fifteen of the patients were men, eleven women.

Dr. Henri Feulard's statistics are based upon an observation of thirty-nine extragenital chancres occurring in thirty-four patients—eighteen men, thirteen women, and three infants—some of them having multiple chancres.

They were situated as follows:

Cephalic Chancres.	{ Upper lip.	8
	{ Lower lip.	10
	{ Labial commissure.	1
	{ Tongue.	3
	{ Tonsil.	1
	{ Chin.	2
Total		25
Chancres of the Trunk. {	Breast.	5
	Subumbilical region.	1
	Inguinal region.	1
Total		7
Chancres of the Limbs. {	Arms.	3
	Fingers.	3
Total		6
Chancres of the anus.		1

Of the patients bearing multiple chancres, one had a vaccinal chancre on both arms; one, two chancres of the chin; one, a chancre of the lower lip and of the left breast; one, three chancres of the right breast; and one, a chancre of the subumbilical and inguinal regions. The latter patient had also a third genital chancre. Another patient had with chancre of the lower lip a chancre of the glans penis.

The detailed reports of these cases are quite interesting, and furnish curious illustrations of the multiple modes of infection in syphilis.

One case was that of a medical man who contracted a digital chancre in delivering a syphilitic woman of a still-born child. The accouchement took place at night, and the doctor did not examine the woman carefully; the next day, upon examination, she was found suffering from vulvar syphilides.

Another case was that of a patient who had a chancre of the tonsil. In this case the medium of infection was a probang with which applications had been made on a simple angina.

A child of twenty-one months, who had a chancre on the margin of the anus, had been infected by means of a sponge which her aunt, suffering from vulvar and anal syphilides, was in the habit of using.

A woman contracted three chancres of the breast from allowing her nipples to be sucked by a syphilitic man.

One child of eight months had a vaccinal chancre on the left arm; another of seven months and a half had vaccination chancres on both arms, which developed within the classic period after vaccination. Mothers of both children were healthy.

Another woman who had a chancre of the breast had contracted contagion by the mechanism of the *nourrisson adulte*.

Doyon presents in the May number of the *Annales de derm. et de syph.*, a review of Pospelow's treatise on extragenital syphilitic infection, based largely upon the study of the cases observed in the Hôpital de Mjassnitky of Moscow, and covering a period of ten years.

The total number of extragenital primary scleroses treated in this hospital for ten years was 198—53 men and 145 women.

Chancres of the lips were observed 49 times—23 of the upper lip, 20 of the lower lip, 1 of the commissure, and 5 affecting both upper and lower lip.

The total number of patients infected *per os* was 99. Contagion *per os*, according to the author, occurs in the laborious class of Moscow by reason of the close community in life of syphilitics, and is not the result of sexual perversion.

There were 3 chancres of the tongue, 1 of the gums, and 49 of the pharynx. Sclerosis of the pharynx constitutes almost one half of the infections *per os*. The tonsils are the most frequent seat. Upon other regions of the body the localizations of the sclerosis were as follows: Upon the breasts, 69; the chin, 1; the eyelids, 3; the nose (inside), 1; the trunk, 10; the anus, 5; the upper limbs, 6; the external surface of the forearm, 1; the thumb, 2; the other fingers, 3; the lower limbs (internal surface of the thigh), 4.

A glance at these figures will show that infection *per os* constitutes the most frequent form of extragenital syphilis (99 in 198) among the working

class, and notably in women; next comes infection by nursing, with a relatively small number of primary scleroses in other regions of the body.

From the author's investigations he concludes that—

1. In the feminine population of the working class of Moscow extragenital infection is much more frequent than in men. This difference (52 men to 145 women) is still more striking when it is considered that in this hospital there are 215 beds for men and only 85 for women of the working class. This predominance for the women exists not only in Moscow, but also in other cities of Europe; it depends partly upon physiological peculiarities of the female organism, such as nursing, and partly "upon the social position of women, who, outside of marriage, do not have equal rights with men in the sexual relation, while other conditions of social relations and intimacy with syphilitic individuals produce them in the same manner as among men."

2. The most frequent form of extragenital syphilitic infection in the lower class is contagion *per os*, and kissing is the principal factor. Drinking and eating with glasses and utensils in common, and notably with wooden spoons, which readily imbibe the syphilitic contagium.

3. The second is nursing with one's own or a strange infant which has been temporarily confided to syphilitic nurses.

4. Syphilitic infection *per os* by the intermingling of knives and forks used in common with syphilitics has been observed principally in small workshops and sewing establishments, which proves the absence of sanitary surveillance of these establishments. Extragenital infection among chambermaids, cooks, and other domestics indicates the lack of care and attention on the part of the employers toward their domestics and among themselves.

5. To combat the spread of extragenital syphilitic infection, a detailed and appropriate system of regulation is necessary, which the author will shortly proclaim.

Intestinal Syphilis.

G. HAYEM and P. Tissier after reviewing the literature of syphilis of the intestinal tract, give the detailed history and post-mortem appearances of a patient, aged thirty-two years, who was received under their treatment with a papulo-squamous syphilide and suffering at the same time with symptoms resembling typhoid fever. The autopsy revealed numerous ulcers in the ileum and large intestine, which are differentiated by the authors from the ulcerations resulting from tuberculosis, typhoid fever, dysentery, leucæmia, etc.

Syphilis localizes itself in the lymphoid organs, Peyer's patches, and the solitary follicles. In the first stage only a small-celled infiltration is found, later ulcers, with thickened edges, filled with purulent yellow-colored masses.

All the layers of the intestine are involved, the peritonæum often thickened and covered with membrane. In old cases one encounters cicatrices with marked retraction. It is impossible to give a clinical picture of the disease on account of the small number of the cases so far observed. A severe, long-continued diarrhœa, with bloody stools, is the most characteristic symptom. The authors believe that such cases are more common than would appear from medical reports, and that they deserve careful study.—*Revue de méd.*, 1889, No. 4.

Herpes Zoster of the Mouth and Gums.

DR. HUGENSCHMIDT (Medical News, June 21, 1890) reports the histories of two cases of this affection, in one of which the lesions were found on the mucous surface of the cheek; in the other, on the gums. In the former case the disease began with high fever and neuralgia of all the branches of the fifth nerve, especially in the region of the superior maxillary division. An examination revealed, on the internal surface of the right cheek, a hypersensitive spot, covered with herpetic vesicles, extending in a line, about an inch and a half long by half an inch broad, parallel to the upper molar teeth.

The second patient, a woman aged twenty-two years, complained of intense neuralgia of the right side of the head, which localized itself along the course of the inferior maxillary nerve. On examination, a line of herpetic vesicles was seen disposed in small groups and parallel to the alveolar border, beginning at the inferior canine and terminating at the posterior aspect of the second molar. The vesicles were situated upon an inflamed mucous membrane. The pain persisted for three weeks, the fever remained, and, strange to say, as soon as the eruption disappeared the patient was taken with a severe pneumonia, which passed into chronic pneumonia and general tuberculosis.

Herpes Zoster in Influenza.

AMONG the innumerable complications and sequelæ of influenza, rashes and skin affections of various kinds have not been wanting. Urticaria, ecthyma, scarlatiniform, morbilliform, and polymorphous erythema, erythema nodosum, roseola, erysipeloid dermatitis, purpura hæmorrhagica, herpes of the lips, nose, and cheek, with several anomalous eruptions, have been reported by various observers. To this formidable list must now be added herpes zoster.

At a meeting of the Medical Society of Bologna, on March 28th, Dr. G. Finzi reported a case in a girl of fifteen who, after recovering from a severe attack of influenza, was seized with neuralgic pain, accompanied by a pricking and burning sensation, shooting from the back around the right side. On being seen, five days later, a chain of herpetic vesicles was found extending along the seventh intercostal space, the lymphatic glands in the axilla being swollen and tender, and pressure along the course of the seventh intercostal nerve making the patient scream with pain. In from eight to ten days the vesicles disappeared, the whole duration of the symptoms having been about a fortnight.

At the same meeting Dr. Camillo Moglia reported a case of herpes zoster corresponding to the eighth intercostal nerve of the right side in a girl of eighteen, in whom the disease appeared at the beginning of an attack of influenza and lasted a month. Another case, in which "bilateral universal" herpes zoster (which, from the description, seems to have been a vesicular eruption all over the body) showed itself on the fourth day of influenza, is recorded by Dr. Luigi Pennetti in the *Riforma Medica* of May 29th. The eruption recurred in a milder form after a second attack of influenza. Altogether the herpes zoster lasted twenty-five days. In Dr. Finzi's case antipy-

rine relieved the pain, but Dr. Moglia's patient proved refractory to treatment.—*Brit. Med. Jour.*, June 7, 1890.

Syphilis Hereditaria Tarda.

HEINRICH NEU understands by *syphilis hereditaria tarda* all syphilitic phenomena which have their origin in hereditary infection and appear at a more or less advanced age. He, however, does not deny the possibility that in single cases hereditary syphilis may remain latent for a long time, perhaps until puberty, and only then present severe specific phenomena. As a proof that in such cases heredity, and not syphilis which has been acquired during the first few years of life, was in question, the author considers the grave and general disturbances of nutrition and development which present themselves in such patients, and which are never offered to such a degree by acquired syphilis. The grayish-white color of their complexion and their earth-colored, leather-like skin he also considers a proof of hereditary syphilis.

In regard to the diseases of the bones, the frequently observed solution of continuity between diaphysis and epiphysis (so-called pseudo-paralysis), as well as the equal thickening of the anterior border of both tibiæ and the increased transverse diameter of the skull, are to be regarded as characteristic of hereditary syphilis. On the other hand, neither the affections of the joints nor those of the skin or mucous membranes offer anything which could be differentiated from acquired syphilis. Again, the three abnormalities set forth by Hutchinson—*i. e.*, certain diseases of the eye, ear, and teeth—are pathognomonic of hereditary syphilis. As regards the eye, keratitis interstitialis profunda is nearly always the result of hereditary syphilis. Disturbances of hearing may be caused indirectly by suppurative processes in the naso-pharynx and Eustachian tubes, or directly by a purulent otitis media, and finally they may also consist in a suddenly appearing deafness without any prodromal phenomena. The development of the teeth is inhibited and their structure changed.

At the end of his work the author quotes seven cases of grave tertiary syphilitic affections occurring in middle-aged persons, the histories of which do not mention any specific manifestations shortly after birth or during the first years of life; that in these cases syphilis was in question was proved, besides the objective signs, by the successful therapy; that it was hereditary syphilis was evidenced by the presence of the above-described anomalies in the development of the whole body, as well as in that of certain separate organs.

A Report concerning the Further Progress of a Case of Acute Multiple Gangrene of the Skin.

DOUTRELEPONT (*Archiv für Dermatologie u. Syphilis*, Heft 3, 1890) continues the history and gives the result of the autopsy in a remarkable case of this rare affection of the skin which he first described in 1886 (*Arch. f. Dermat. u. Syph.*, p. 179). He observed the patient until her death from pulmonary tuberculosis in September, 1889. His further observations confirm the opinion expressed in his previous article, that he had to do with a case of *zoster gangrænosus universalis recidivus*.

The following is a brief recapitulation of the case : A twenty-one-year-old girl, apparently healthy, who had suffered some time before the onset of her skin affection from hysterical convulsions during an attack of intestinal catarrh, stuck herself on the 1st of August, 1884, with a needle under the left thumb-nail. On the day after the injury small gangrenous spots appeared on the first phalanx of the thumb, then on the dorsum of the hand, the forearm, the shoulder, and back of the same side. About ten weeks later the disease extended across the middle line of the body on the back. Then the sacral region, the anterior surface of the trunk, the thighs, feet, legs, and right arm were in turn involved ; somewhat later the same eruption was discovered on the mucous membranes covering the glosso-epiglottic ligament, the palatine arches, and the mucous membrane of the external genitals. For a long time the localized gangrene, which extended more or less deeply into the cutis, was the only eruption present. After the slough was thrown off the wounds healed and cicatrized, leaving at first keloid-like scars, later smooth ones.

Twenty-one months after the beginning of the disease groups of vesicles appeared in place of the gangrenous spots or alternating with them. Still later large bullæ, surrounded by vesicles, made their appearance, the larger bullæ being formed by the confluence of smaller ones. Fresh outbreaks of the eruption were ushered in with fever, which disappeared only with the complete evolution of the eruption.

In spite of repeated examinations, no disturbance of sensibility was discovered except a hyperæsthesia on the affected regions ; the reflexes were normal. Late in the course of the disease the patient developed attacks of severe nervous excitement, during one of which she attempted suicide. In 1889 she developed acute pulmonary tuberculosis, from which death resulted. The autopsy revealed disseminated tuberculosis of both lungs.

Nothing abnormal was discovered in the brain or spinal cord. A histological examination was made of the cord and peripheral nerves, with negative result.

Since Doutrelepon's first report was published, in 1886, Kopp, Routier, Kaposi, and Haren Noman have each reported similar cases, but in none of them was the eruption so extended as in the case of Doutrelepon.

Treatment of Syphilis by Injections of Acetate of Thymol and Mercury.

DR. WELLANDER recapitulates his experience with 286 injections of hydrarg. thym. acet. in 44 patients. He employed this preparation in doses of 0.1 to 1.0 of paraff. lign. at intervals of four to five days, as recommended by Neisser, and, on the whole, confirms the statements which were made by Jadassohn and Zeising in regard to this remedy. Roscola and papules had mostly disappeared after two to four injections; grouped papules and gummata were removed after five to six injections. Besides, local treatment and kal. iod. were used. Infiltrates occurred frequently, as was to be expected after the experience with it at the Breslau clinic; these were probably caused by the circumstance that the majority of the injections were applied subcutaneously. Especially worthy of mention is a case in which after six injections albumin was found in the urine ; it disappeared after a few days, but recurred

again a few days after the seventh injection. In a number of cases the urine after termination of treatment was examined for mercury, and in one of these it could be detected even one hundred days after it had been discontinued. As regards recurrence, it was also here noticed that this remedy possesses no advantages over others. Wellander comes to the conclusion that he prefers hg. thym. acet. to all other mercurial preparations which have been used up to now, on account of its causing less pain, slighter infiltration, and exciting less frequently stomatitis.—*Arch. f. Dermatol. und Syph.*, 1889, 4. Heft.

Hydroxylamine in the Therapy of Skin Diseases.

1. GRODDECK (Monatshefte für prakt. Dermatol., 1890, x, No. 4) has tried hydroxylamine (which was first recommended by Eichhoff) in Professor Schweninger's clinic. He used it in the form of a salve and in an alcoholic solution, the latter in a strength of 0·075 to 1·5 : 100. He applied the remedy in the treatment of twelve cases of inveterate psoriasis, four cases of scabies, two cases of mycosis circinata (pityriasis rosea), and in one case of each of the following affections : pityriasis versicolor, lupus erythematodes, pityriasis rubra, eczema seborrhoicum, and seborrhœa capitis. A favorable effect of the action of the remedy was only seen in eight cases of psoriasis, but which also appeared more slowly than that which was observed after the employment of chrysarobin or pyrogallie acid. Upon the *healthy* skin hydroxylamine, in a dilution of 1 to 1,000, had no influence. A 0·2-to-0·5-per-cent. preparation causes occasionally phenomena of irritation, while a one-per-cent. preparation nearly always excites such. The remedy seems, according to the author, not to be appropriate for patients who are not confined to bed, as it requires careful watching of the patients, on account of danger of intoxication and its property of easily exciting inflammation.

2. P. J. Eichhoff (*ibid.*) objects to the conclusions of Groddeck that he has employed the above remedy in the treatment of diseases for which it was neither recommended nor appropriate (scabies, lupus erythematodes, and pityriasis rubra). Besides, the manner of application was not adapted to the purpose, and the strength, especially of the salves, which always act less powerfully than solutions, insufficient.—*Centralblatt für die medic. Wissenschaften*, 25, 1890.

On the Nature and Treatment of Eczema.

UNNA writes on the above subject in the British Journal of Dermatology for August, 1890, and makes a strong plea for the specific nature of the disease. He believes that the true and essential cause is the inoculation of a germ, probably of vegetable nature. The germ, however, proliferates in the epidermis and its appendages only, when the soil is suitable for its growth.

The various predisposing and exciting causes which have previously been regarded as the sole causative factors must now be regarded only as preparing the nutrient basis for the reception and proliferation of the germ.

The congenital nature of the skin (heredity), supervening diseases, especially those which alter the skin secretions (rheumatism, gout), changes in the skin tissue such as take place at the various periods of life (dentition, menstrua-

tion, climacteric), and other intercurrent diseases of the skin (acute exanthemata)—can be all considered as predisposing causes, or, better, as pre-existing improvements of the nutrient base. External warmth and moisture, simple inflammations and stases, as well as all external irritants, may be described as exciting causes, or, better, as accidental improvements of the nutrient base.

The parasitic theory, then, instead of denying all the previous observations which have been made on the ætiology of eczema, requires them as essential auxiliary causes. In defining eczema, Unna modifies slightly the definition of Erasmus Wilson, and calls it a *chronic parasitic catarrh of the skin*, with *desquamation, itching*, and the *disposition to respond to irritation by exudation, and well-marked inflammation*. The author concludes his interesting article as follows :

1. The treatment of chronic eczema may be considered with advantage under two heads : *a.* By the use of antiparasitic measures the germ itself is attacked. This is the direct treatment. *b.* On the other hand, by it the epidermis, which is the nutrient soil, becomes less suitable for the growth of the specific germ. This is the indirect treatment.

2. The radical treatment of eczema aims at the destruction of every single germ in the depths of the epidermis.

A disappearance of the eczema efflorescence is by no means equivalent to a thorough cure of the disease, which is, however, always attained by the prolonged and continuous use of specific measures.

3. There are various chronic eczemas, which may be distinguished with certainty by their clinical symptoms and course. They do not by any means always pass through the so-called "stages" of eczema, of which we hear so much, but each form has its own type, its own variations, and of course its own specific treatment. As examples I may quote the eczema of scabies, the seborrhoeic eczema, follicular eczema, and papular eczema.

4. As the therapeutics of these ætiologically different eczemas is not the same, I will limit myself to special suggestions for that variety which is the most common—viz., the seborrhoeic eczema. This begins as a desquamative erythema, similar to pityriasis, and continues as such, or develops either into an oozing eczema, or into squamous or crusted psoriasis-like eruptions. When it becomes vesicular it is chiefly from the effect of external irritation.

For the treatment of this eczema we possess as specifics strong alkalies, several metallic oxides, and the reducing group of medicinal agents. In this series of specific remedies the most worthy of mention are caustic potash, zinc oxide, lead oxide, mercuric oxide, sulphur, resorcin, pyrogallol, chrysarobin, and the various kinds of tars.

5. The choice of the remedy and its form of application are determined in seborrhoeic eczema, as in all forms of eczema, by the degree of inflammation which is present.

When the inflammation and oozing are pronounced, the milder specifics are indicated, such as zinc oxide, lead oxide, sulphur, resorcin, in the form of powders, lotions, pastes, and glycerin gelatines. When the inflammation is less and the dryness greater, the stronger specifics, such as chrysarobin, pyrogallol, tar, and mercuric oxide, are indicated, especially in the form of salves, salve mulls, plaster mulls, and waterproof dressings.

6. It may be taken as a general rule that among the remedies and modes of application those must be selected for each case which will produce the most powerful effect on the specific germ (direct or indirect) without exciting an artificial inflammation. A really "irritating" treatment is not necessary, even in the case of the oldest and dryest eczemas; if only provision is made for thinning down the horny layer (an ordinary sequence), the specific agents will have the desired effect without any irritation whatever. Indeed, an irritating mode of treatment of eczema is only justified on principle when it is used as a test to spots which are apparently healed, in order to recognize the presence of any surviving germs which they may still contain. The alternation of anti-eczematous and provocative treatment corresponds to Tyndall's interrupted sterilization.

7. The only internal remedy which exercises any specific though limited influence on seborrhoeic eczema, and especially on its drier forms, is arsenic. All other forms of treatment of the general organism, and of other organs which have a direct association with the skin (such as the bowels, uterus, kidneys), all dietetic cures, all baths (except sublimate baths), may be considered only in so far as they may possibly assist the local treatment of the skin in an indirect way.

8. In the search for new specifics against the various forms of eczema their harmlessness for the general organism must be taken into consideration, and with regard to the reducing medicinal agents in particular it must be noted whether there is an absence of irritating properties in their oxidation products.

Book Reviews.

Maladie de la peau dite maladie de Paget. Par le Dr. LOUIS WICKHAM, Ancien interne en médecine et en chirurgie des Hôpitaux de Paris, etc. Paris : G. Masson, Éditeur, 1890.

THIS is by far the most complete treatise upon Paget's disease that has appeared. The book is divided into three parts. In the first part we have a review of sixteen published cases, the cases being given in condensed form. They follow the histories in full of six heretofore unpublished cases. From a study of these cases the author deduces the ætiology, symptomatology, and diagnosis of the disease. Part II contains an account of the histological work of various investigators of the malady, and then a statement of what the author believes to be its true histology. Part III is devoted to the pathology of Paget's disease, and to its psorosperms as a cause of other varieties of cancer. Separate sections are given to a consideration of the treatment of the disease, to its classification, to the proper conclusions to be drawn from the study of the contents of the book, and finally to a bibliography of the subject.

The monograph is full of good things, and should be read by all who are interested in the subject. We can here notice but a few of the newer views of the author, and first as to the ætiology of the disease. Our author finds

that the seat of predilection is the breast, but that the disease may occur elsewhere; that the majority of its victims are women, but a case has occurred on the breast of a man; and that the cause of the trouble is a psorosperm. The development of cancer may not take place for twenty years after the first manifestations of the disease, and when it does come it may be either superficial or deep. The finding of the psorosperm is a diagnostic feature most to be depended upon, but a good table of differential diagnosis is given on page 77. The disease should be "considered as a special affection of the superficial epithelium, consisting in various degrees of cellular proliferation. It is a chronic affection of the skin due to a parasite of the order of psorosperms. These parasites seem to have a direct influence in the development of the epithelioma." Owing to the slow course that the disease runs in many cases, the prognosis is not considered bad, especially if the disease is treated in the early stages by such parasitocides as chloride of zinc (1 to 3), followed by mercurial plaster, and alternating with an ointment of iodoform (1 to 10). Later on, if the induration shows that epithelioma has developed and that it is superficial, it should be scraped out; if the cancer is deep-seated, the breast should be amputated at once. The book is illustrated with two colored pictures of the disease, and a series of lithographs depicting the psorosperms and their development.

G. T. J.

Wood's Medical and Surgical Monographs. March, April, May, and June Numbers, 1890. William Wood & Co., Publishers, 56 Lafayette Place, New York.

THE varied and interesting nature of the subjects embraced in the sixth volume of this valuable collection of monographs will be evident from a glance at the titles.

March Number.—The Treatment of Cancer by Electricity, by Dr. J. Inglis Parsons, London. The Dreadful Revival of Leprosy, by Sir Morell Mackenzie, M. D. Diseases of Old Age, by Dr. A. Seidel, Berlin. Urinary Neuroses of Childhood, by Dr. Louis J. Guinon, Paris. Varicose Veins of the Lower Extremities, by William H. Bennett, F. R. C. S. Uses of Electrolysis in Surgery, by W. E. Steavenson, M. D., London.

April Number.—The Human Foot; its Form and Structure, Functions and Clothing, by Thomas S. Ellis, M. R. C. S. Modern Cremation; its History and Practice, by Sir H. Thompson, F. R. C. S. Aphasia, a Contribution to the Subject of the Dissolution of Speech from Cerebral Disease, by James Ross, M. D., LL. D.

May Number.—Insanity at the Puerperal, Climacteric, and Lactational Periods, by William Bevan Lewis, L. R. C. P. Treatment of Diseases of Women by Massage, by Dr. Robert Ziegenspeck, Munich. The Treatment of Internal Derangements of the Knee Joint by Operation, by Herbert William Allingham, F. R. C. S. The Idiopathic Enlargements of the Heart, by Dr. Oscar Fraenntzel, Berlin.

June Number.—Bronchial Asthma; its Causes, Pathology, and Treatment, by John C. Thorowgood, M. D., F. R. C. P. Convulsive Seizures, by J. Hughlings Jackson, M. D., F. R. C. P. Surgical Treatment of Diseases of the Brain, by Ernst von Bergmann, Berlin. Index for Vol. VI.

Books and Journals Received.

On Urticaria in Infancy and Childhood. By T. Colcott Fox, M. B. Lond., M. R. C. P.

Cases of Lymphangiectasis of the Hands and Feet in Children. With Colored Plate. By T. Colcott Fox.

Notes on Lichen Circumscriptus vel Circinatus (Seborrhœa Corporis). By J. F. Payne, M. D.

On the Relation of Impetigo Herpetiformis (Hebra and Kaposi) to Dermatitis Herpetiformis (Duhring). By Louis A. Duhring, M. D.

Cases of Typical Dermatitis Herpetiformis. By Louis A. Duhring, M. D.

Anthrax—the Disease of the Egyptian Plagues. By William Henry Blane, M. D.

Seborrhœa. By George Thomas Jackson, M. D.

The Seborrhœic Wart, Verruca Seborrhœica, Verruca Senilis, etc. By S. Pollitzer, A. M., M. D.

Apparent Cancerous Transformation of Syphiloma of the Tongue. Excision of the Tongue by the Galvano-cautery. By G. Frank Lydston, M. D.

Sexual Perversion. Satyriasis and Nymphomania. By G. Frank Lydston, M. D.

Glandular Tumors of the Neck. By J. William White, M. D.

A Method of applying Antisepsis in the Treatment of Recent Anterior Urethritis. By J. William White, M. D.

The Modern Treatment of Vesical Calculus in Male Children. By J. William White, M. D.

Removal of Enormous Vesical Calculi by the Suprapubic Route. By J. William White, M. D.

Oophorectomy in Gonorrhœal Salpingitis. By J. William White, M. D.

Enucleation of Tuberculous Glands. By Thomas W. Kay, M. D.

Varicocele. By Thomas W. Kay, M. D.

A Successful Case of Nephrectomy. By George Ben Johnston, M. D.

Large Doses of Iodide of Potassium. By Augustus A. Eshner, M. D.

Phimosis and the Prepuce, or a Plea for Circumcision. By P. C. Remondino, M. D.

Electrolysis in the Treatment of Stricture of the Rectum. By Robert Newman, M. D.

De la folliculite et perifolliculite chez les fileurs et rattacheurs. Par Eugène Wagner, M. D.

Des dermatoneuroses. Par le Professeur H. Leloir.

Des dermatoneuroses indicatrices. Par le Professeur H. Leloir.

Lésions suppuratives de la peau à la suite de l'influenza. Par le Professeur H. Leloir.

De la chéloïde, symptomatologie et anatomie pathologique. Par H. Leloir et E. Vidal.

Traitement de la chéloïde et de la cicatrice hypertrophique. Par E. Vidal.

JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

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Original Communications.

IMMIGRANT DERMATOSES.*

By JAMES C. WHITE, M. D.,
Professor of Dermatology in Harvard University.

I HAVE long had it in mind to write a paper upon the subject to which I now ask your kind attention, for, although it must have forced itself upon the consideration of most members of this association, especially those practicing in our maritime cities, it has not yet received the public recognition on our part which, as it seems to me, it demands. It is my purpose, therefore, to give a brief account, first, of those affections of the skin which are directly caused by life on shipboard; secondly, to speak of certain conditions of the skin induced after arrival by influences not previously operative; and, thirdly, to mention the importation of those diseases which are more prevalent in other countries than our own.

1. Direct Effects of the Voyage.

It is hardly necessary that I should attempt to present to you a description of the conditions of life in the steerage of a large immigrant steamer, for the impressions, which you have so often received through eyes and nose on looking down upon this class of passengers upon the lower deck on your home voyages, speak more forcibly than any words of mine could of the atmosphere and customs which must prevail in the crowded and poorly ventilated compartments below. To those of you who have not inspected the latter, the graphic narration of certain English reporters, who have heroically taken a transatlantic steerage passage for humanity's sake, may be commended. It may be enough for our present purpose to say that existence under such conditions is simply vile.

* Read at the fourteenth annual meeting of the American Dermatological Association at Richfield Springs.

The emigrant reaches his ship at the European port from far inland at times, often in a state of mental depression at leaving his kindred, which continues as a profound homesickness throughout the voyage. To this are added, in the majority of cases, the misery of seasickness, often of several days' duration, the usual condition of constipation, the entire inability to take exercise on the part of those who have been accustomed to constant muscular toil, and the necessary confinement below decks in the foulest atmosphere during stormy weather. It is not strange that under all these depressing influences the physical condition of the immigrant should be lowered, and that the effects of the voyage should find expression in disturbances of various functions and organs, which may be felt for months after landing. Cessation of the menstrual flow, anæmia, and disturbances of digestion are among the frequent and best known manifestations of this state. Besides these conditions which impress the system as a whole, there are certain agencies, inseparable from the voyage, which may affect the state of the skin particularly. Exposure to the glare and heat of the sun when reflected from the deck unprotected by an awning, and the action of the salt spray, will often, as is well known, produce a marked dermatitis of the face and hands after a single summer's day upon the water. A much higher grade of inflammation may naturally follow the operation of such agencies for ten or fourteen days continuously.

It is a not infrequent occurrence that young persons of both sexes come to the hospital within a few days, or two or three weeks even, after landing, presenting such typical lesions of the skin that the fact of recent immigration is at once recognized. These may be roughly classified as urticarial, bullous, and ecthymatous efflorescences, and they may occur in combination, or any one of them may be the sole form of eruption in individual cases. The most common is what may be regarded as a bullous urticaria, affecting chiefly the limbs, but less frequently the whole surface. It differs from ordinary cases of this affection in the greater predominance and larger size of the blebs, and their tendency to assume a protracted course, or to terminate in deep-seated ecthymatous lesions. In some cases bullæ of all sizes are the only efflorescence present. In the severer forms—those which reflect more evidently the profoundly depressing influences of the voyage upon the general system—the type of the eruption is chiefly that of ecthyma.

The seat of these manifestations, as might be expected, is chiefly the lower extremities, as in other cachectic conditions, and they range in intensity from superficial excoriations of circular shape to deep-seated sloughs and ulcerations of indolent and unhealthy character. They vary from a pea to an inch in diameter, and may present freely oozing surfaces, or be covered by thick sero-purulent and hæmorrhagic crusts. Their duration depends upon the restoration of the patient to a healthy condi-

tion, but is generally several weeks. They may leave pigment stains, which fade very slowly.

Another condition of the skin incidental to immigration is that dependent upon vaccination, so frequently performed upon steerage passengers. Although this may not be universally enforced, it is virtually practiced upon all who can not show a "sufficient mark." It has seemed to me that the local process is more severe, deeper, affecting a wider area, and terminating in prolonged ulceration more frequently, than after ordinary vaccination performed on shore, if I may judge by a limited number of observations. The general post-vaccine forms of efflorescence may be of unusual variety and severity too, but I have no means of judging as to the relative frequency of their occurrence. These exaggerated effects of vaccination may, no doubt, be partly explained by the fact that a considerable proportion of those operated on have passed the age of childhood, and experience then the impression of the virus for the first time, but they are without doubt also another expression of the depressing conditions of the sea-life we have been considering. I have never seen grounds for believing that they were the result of the employment of impure virus, although instances are by no means infrequent of patients attributing these unwonted manifestations to such a supposed cause.

The element of contagion, too, becomes a factor in the acquirement of cutaneous disease on shipboard. I do not intend to include within this class the exanthemata, which are largely controlled by quarantine regulations, but refer to the parasitic affections only. Every steerage load of passengers is accompanied, without fail, by countless additions to their fauna, which in the close contact of the crowded quarters are readily transferred from the affected to new hosts, although they may not make their presence visible by cutaneous changes until after landing. The mycoses, although largely imported, are not so easily communicated from passenger to passenger.

2. New Impressions.

I may not inappropriately make a brief mention here of certain conditions of the skin incidental to immigration, although in no way importations. They are the result of agencies operating upon its tissues after arrival, to which they have never been exposed at home. The most striking example of such excessive susceptibility to new impressions is found in the action of mosquitoes upon immigrants from countries where these insects do not exist. The extraordinary effects of their "bites" in such cases have been described in detail in my book upon dermatitis venenata, and need not, therefore, be repeated here. It will be enough to state that, instead of the simple wheals and excoriations which they usually produce upon most persons here, far more aggravated forms of inflammatory lesions

are often excited—large areas of erythema, extensive bullæ, pustules, and furuncular processes. A whole family may be thus poisoned within a few days after landing, and so characteristic are the appearances thus produced that the fact of recent immigration may often be recognized by the mere inspection of such patients. I would explain such extraordinary manifestations on the theory of a lack of protection acquired under the previous influence of the virus.

Another form of cutaneous inflammation may be occasionally noticed in persons who have recently come to America from northern Europe, where their fair skins have never before been exposed to the intense heat of our summers. I have in several instances seen severe grades of dermatitis calorica upon the faces, arms, and hands of such immigrants after working in the sun, characterized by intense general redness and bullæ of great size.

3. *Imported Affections.*

Let us consider now the importation of those dermatoses which are more prevalent in other countries than with us. The most common one is undoubtedly—

Scabies.—There is a constant influx of itch from foreign countries, which is undoubtedly one of the causes of its notable increase among us in recent years. In the returns of our association of 1883, for example, there were reported 207 cases in a total of 11,514, representing a percentage of 1·8 of all cutaneous diseases. In the last-published returns, for the year 1888, five years later, there were 1,092 cases in a total of 15,165, a ratio of 7·2 per cent. The statistics of my own clinic confirm this conclusion in a very striking manner. In the period of 1878-'82 the number of cases coming to the Massachusetts General Hospital was only 69, whereas in the five years ending with 1889 this number had increased to 725.

But, notwithstanding this increase, it is still a rare disease with us when compared with its occurrence in other countries, and its further extension here is inevitable unless proper measures be taken to destroy it on arrival. Fortunately, the means of accomplishing this are simple and rapid. If all immigrants were carefully inspected at quarantine, and every one affected were submitted to a three hours' treatment, as in the quick cure of foreign military hospitals, we might before long reduce the prevalence of scabies to its former low percentage.

All forms of pediculosis should meet with the same reception on arrival.

It is a trifling condition to impose that the immigrant should be cleansed of such extraneous elements of disease at least before being received as one of ourselves.

Tinea Favosa.—The relative prevalence of the vegetable parasitic affec-

tions among us is liable to be materially modified by immigration, as may be readily demonstrated by an examination of the statistics of skin diseases in different countries. By our own returns tinea trichophytina forms 3.259 per cent., tinea versicolor 1.02 per cent., and tinea favosa only 0.286 per cent. of all affections of the skin. In Sweden favus is far more common than tinea trichophytina, 4,000 children in the public schools and Children's Hospital in Christiania furnishing, according to Hiorth,* 121 cases of the former to 59 of the latter. In Italy favus is very prevalent and far more common than ringworm. Now Scandinavia and Italy send enormous numbers of their peoples to our shores yearly, so that among them must come many cases of favus. Russian Poland, too, is sending this disease to us in noticeable amount. Indeed, I rarely see a case of it among our native population, and, were it not for the children of Polish and Italian immigrants, the clinic in Boston would almost wholly lack material for illustrating it. It is more plausible to explain the greater prevalence of this affection in the above-named countries on the ground that the habits of life of their poor inhabitants make the transfer of a difficultly inoculable parasite more easy, than to assume that the fungus finds more favorable external conditions for growth there than here.

Lupus. — Notwithstanding the enormous prevalence of pulmonary tuberculosis in this country, the comparatively rare occurrence of the cutaneous forms, hitherto called lupus vulgaris, has long been recognized. In the tables presented by me to the International Congress in 1876, it made but 0.34 per cent. of all the American cases of cutaneous disease against 3 per cent. of the Vienna cases. In the combined returns of this society for ten years it forms but 0.433 per cent. of the 123,746 cases reported. It is plain, therefore, that we are open to an increase in the relative occurrence of this affection at home by the influx of foreigners to our shores. Without any positive data at hand to offer, it is my impression that a noticeable preponderance of the cases at my clinic are residents of or immigrants from the British provinces lying to the north of the United States.

There is no longer doubt in my own mind that our definitions of cutaneous tuberculosis must be greatly enlarged to comprise all the clinical forms we now recognize, and that no such sharp dividing lines as have hitherto separated lupus as a distinct variety from them can be longer maintained. Certain it is that the several conditions of tissue change called lupus, scrofuloderma, scrofulous gummata, tuberculosis verrucosa, etc., may occur not only simultaneously in a patient, but upon a limited area of the skin even, as one extremity for instance, and blend as one

* Viertelj. für Derm. und Syph., 1888, p. 284.

common process, as well as that there are other lesions, not commonly included under the above titles, which are also to be properly regarded as manifestations of cutaneous tuberculosis. There is abundant evidence, in my opinion, that such local forms of the disease are inoculable and auto-inoculable, and that one form may change into another clinical variety. I have upon record a considerable number of cases in which a most significant coincidence exists between such forms of single or multiple lesions upon the skin of a child and phthisis in the mother, as well as of cases where the allied sequence of scrofulous sores in one member of a family and the subsequent development of verrucous tuberculosis upon the hands of another, who has habitually dressed it, may be traced. It seems to me, therefore, plausible that the unequal prevalence of cutaneous forms of tuberculosis, like lupus, in various countries, may be explained by the difference in the habits of personal cleanliness which characterizes them. If we as a nation are exceptionally prone to expectoration, we may well understand how in this way pulmonary tuberculosis may be fostered to the enormous extent to which it prevails among us, whereas, if we are more cleanly than some other nations in the care of the skin, it is evident that we shall remain more exempt from the manifestations of the disease in its tissues. In accordance with this view, it is apparent that the prevalence of tuberculosis cutis among us may be diminished by instructing the public as to the dangerous and contagious character of the discharges from and of contact with all forms of the disease, and that it is likely to be increased by immigration from nations whose dirty habits favor such means of communicating it.

Leprosy.—It seems hardly necessary to say more of leprosy in this connection than that it is *par excellence* an immigrant within our borders. It has come to us from many sources and it is impossible to determine the date of its first importation. I may be permitted to quote upon this point the remarks in my paper presented to the association in 1882:

“This brief account of the geographical distribution of the disease in North America suggests a mention at least of the sources from which it has been derived, and the dangers to which we are still exposed through immigration from them. Spain, at the time of her colonization of the southern portion of North America, had many lepers within the home kingdom, through whom, in the Gulf States and Mexico, the seeds of the disease were planted. Her island colonies in the Spanish Main also served, as at the present day, for distributing foci in their intimate commercial relations with our continent. Of this implantation, however, no traces, save those of historical record, remain along our shores, although it survives in a state of no inconsiderable activity in the West Indies and the maritime countries south of Texas.

“Portugal, too, scattered her leprous settlements over many of the

islands of the Atlantic, with which our sailor population has kept up constant intercourse through our fleets. It is from these two sources that the occasional cases among our native stock, those known to have been acquired out of the country, have been mostly derived.

"From Africa also we drew a supply of the disease in connection with our importation of negroes, and the instances observed among the blacks in the Southern States, up to a very recent period, were no doubt largely of this origin. With the cessation of the slave trade we were relieved from this source of danger.

"France, as we have already seen, peopled her North American colonies in the Gulf with numerous lepers, so that Old-World and old-time means were employed in dealing with the disease so successfully that it was eradicated before Louisiana became one of the United States. But the home country remained leprous in some of her districts, and has succeeded in re-establishing, through her emigrants, the modern outbreak of the disease in Louisiana we have just been studying, although its immediate origin is so completely a mystery at present. In Tracadie, too, the disease originated in and has continued to affect mainly the residents of French origin, although in neither instance were those first attacked direct immigrants from their mother country.

"From the infected regions of Norway and Sweden immigrants are constantly pouring into our land and forming a new Scandinavia in our northwestern States, with a not inconsiderable number of lepers, at least in the incubative stage, among them.

"And upon our Pacific shore, both in California and Oregon, the much-feared invasion from China was certainly not without its tangible elements of evil in the victims of leprosy already developed among us. Thus, both at the extreme north and south and west of our boundaries, and directly in the heart of the country, have been planted centers of the disease, from which, under favorable conditions, it may spread in all directions."

Since this was written public interest has been awakened in the disease, its real nature has been definitely determined, and its contagiousness satisfactorily demonstrated. Popular and even professional dread of it has been excited to such a degree that strict measures have been adopted for its exclusion all along our Atlantic and Pacific seaboard, and it seems improbable that advanced cases will hereafter gain entrance to the United States through such points of ingress. A Norwegian case has recently been arrested at quarantine and sent back from Boston to England, from one of whose ports she sailed hither.* Our danger lies in the admission of cases of leprosy in which the disease has not developed enough to be easily detected. Its prolonged period of incubation and its obscure pro-

* Yet, it might well be asked, why turn this woman back and admit by the same steamer perhaps many another infected by syphilis?

dromal stages will continue to permit its contributions to our immigrant diseases to an indefinite extent. It is owing to our more civilized customs of daily life, no doubt, that it has failed to multiply or to extend seriously beyond the very restricted limits of its present foci.

Melanosis Lenticularis Progressiva.—This rare and strange affection, to use the name which most commends itself to me, may fairly be regarded as an imported dermatosis. So far as I can ascertain, none of the cases which have been observed in this country—eleven in all—have occurred in native American stock, if such a type exist. Dr. Duhring's patient was of "Irish parentage." Dr. Taylor kindly writes to me about his seven cases as follows:

"My seventh case was in the person of a child, born of recently landed Polish Jew parents. My first case came of a wealthy German Jew family, which had been in America for many decades. My second to sixth cases were in cousins, the offspring of German Jew parents born in America."

My own two cases were the children of Russian Polish Jews.

Dr. Elsberg, of Warsaw, has reported in a recent number* of the *Viertelj. für Derm. und Syph.* two new cases, which makes the total number of instances thus far reported, according to his estimate, fifty-two. In this article he calls attention to the large proportion of Jews from Poland and Galicia in this list of patients—24 per cent.—and expresses the opinion that, if the nationality of all recorded cases were given, this ratio would be greatly increased.

In answer to an inquiry upon this point, Dr. Crocker, of London, kindly sends word that his three cases were all children of an English farmer, and that some Irish and Scotch cases have been observed since his own were published.

Professor Vidal, of Paris, has also placed me under obligation by the following reply to my question:

CHEP. CONFRÈRE: The cases observed in France can not be cited in support of the ætiological hypothesis of Anton Elsberg, physician of the Israelitish Hospital of Varsovia.

The Delahaye children (Cases I and II of my memoir of 1883), both girls, were born in the environs of Paris, of French parents, *not* Israelites, nor descendants of Israelites; so far as their ancestry can be traced, all were French.

The three boys of the Larré family (Cases III, IV, and V of my memoir) belonged to a Catholic family, never having an alliance with Israelites, and inhabiting, from one generation to another, the department of Basses Pyrénées. I have inquired concerning the patients with xeroderma pigmentosum presented before the International Congress of Dermatology (*r. Trans.*, 1889, pp. 161, 169) by MM. Quinquand and Thibierge, with the following result: None of the ancestors of the two sisters, Berthe and Fleurette Condray, pre-

* Heft 1 and 2, 1890.

sented by M. Quinquand, were of the Israelitish race. They were both born in Paris, as were their father and mother. The maternal grandfather was from the department of Seine et Oire, the maternal grandmother from Cote d'Or, the paternal grandfather from Paris, the paternal grandmother from Creteil, near Paris.

The patient of M. Thibierge, a young man, sixteen years old, was born in the department of La Manche, of Norman parents, inhabiting the environs of Carenton for generations; no alliance with foreigners or with Israelites.

I do not know if you have information of the origin of the patient of Prof. Arnozan, of Bordeaux (*Annales de dermatol.*, 1888, p. 369). This boy of eleven years was born of parents living in Libourne (Department of La Gironde). . . .

The fact that in some of the instances recorded by Dr. Taylor and myself the patients were born in this country furnishes no counter-evidence against the proposition that the disease is to be regarded as an importation, for it is pre-eminently a family disease, although apparently not directly at least hereditary. It has come too recently under our close observation to determine the interesting question of its occurrence in distant ancestry or in equally remote descendants. It seems scarcely possible that an affection confined to so few families among mankind, as thus far observed, and affecting so especially the epithelial structures of the skin, tissues most prone to transmissible tendencies, should assert itself in one generation alone, and be independent of the law of heredity and descent.

The parents of the cases observed by Dr. Taylor and myself were immigrants, mostly of recent date, and in some of them the disease had begun to manifest itself before leaving home. Immigration from Russian Poland is certainly not to be encouraged, for the increasing influx of its people, who seem to be of the most filthy personal habits, has exercised within the last few years a material influence upon the relative occurrence of certain cutaneous affections, especially those of a parasitic nature, in Boston, or at least in the districts which furnish the city contingent of my dispensary practice.*

Prurigo.—At the last meeting of this association a paper was presented upon "the occurrence of prurigo in America," in which the writer, Dr. Zeissler, quotes me as declaring that the disease did not exist in America.

In 1876, the year before the formation of this society, I read before the International Medical Congress a paper upon variations in the prevalence of diseases of the skin in different countries. At that time I was able to collect statistics of the occurrence of but 12,000 cases of such affec-

* It may not be unimportant to state that one of the cases which I reported to the association has accepted an offer to join a traveling show, but under what popular title I am unable to state.

tions in this country under the observation of reliable dermatologists. As all of these gentlemen had had ample opportunities of studying the disease in question in Vienna, it may be presumed that the data furnished by them, on which the statement was based that not a single case had been recorded in dispensary practice, were reliable. Two or three doubtful cases of mild type had been observed among the private patients of these physicians. In that paper I quoted its occurrence 740 times in 24,000 cases in Hebra's clinic in Vienna. It may be fairly claimed, then, that at the period above represented prurigo was virtually unknown in America to those even who could recognize it.

Since then the association has tabulated in the first ten years of its existence 123,746 cases of disease of the skin, chiefly under the observation of its own members, of which 34 are set down as prurigo. It is a significant fact that in the first five years of these returns (1878-'82) but six instances of the disease were recorded out of 58,617 cases, and these early figures covered many preceding years of previously unreported disease. In the succeeding five years (1883-'87) twenty-eight cases are reported as occurring, of which twenty-one were observed in New York.

It would appear, then, that prurigo is becoming more prevalent among us, or that dermatologists recognize it more readily than previously, or are more disposed to give this name to conditions of the skin which they formerly placed among other affections. I believe that true prurigo is still an extremely rare autochthonal disease in America, and my colleagues in Boston would agree with me upon this point, so far as that city is concerned, I feel sure. That it is becoming a more noticeable imported affection is equally true, no doubt, and it is in such towns as New York and Chicago, where there is an enormous resident German population, that we may expect to find such evidence of it as is shown in our recent annual returns, and in the interesting data furnished by Dr. Zeissler above referred to. Of the twelve cases reported by him, it may be remembered, only one was of American parentage, while eleven were either of foreign birth or were born here from German parents.

Unless some more stringent laws are made to keep out of our country the pauper and dirty populations of Europe, the direct importation of the diseases we have been considering, and those which may arise as well from the filthy habits they bring with them and transmit to their children, must follow with increasing magnitude. If the proposed plan of the U. S. Marine-Hospital Service, to station physicians in every European port from which immigrants embark to this country for the purpose of keeping back improper classes, be made sufficiently authoritative and restrictive, it can not fail to be of vast benefit. It is certainly as important to protect ourselves by legislation against the introduction of ignorance, filth, and dis-

case, as against cheap labor, if we would keep our civilization upon a high plane. The Chinese have set us an example of building walls, which we might better erect against other nations than theirs.

In conclusion, I venture to suggest for the consideration of this association the propriety and importance of memorializing the National Government with regard to taking such steps as may be possible and practicable for the establishment and execution of the following measures:

1. To cleanse all immigrants of animal parasites on landing by treatment of person and clothing.
2. To retain in quarantine all immigrants with other contagious diseases, including venereal affections, a sufficient time for treatment.
3. To return to their homes all persons affected with such contagious diseases as it is impracticable to treat in such way, as leprosy, tuberculosis, and advanced syphilis.
4. To provide for efficient medical inspection at foreign ports of emigration, with the power of arresting importation of dangerous diseases to this country.

INTERESTING CASES, DERMATOLOGICAL AND OTHERWISE.*

By R. W. TAYLOR, M. D.,
Surgeon to Charity Hospital, New York.

AS the duty of the entertainer carries with it the obligation to provide or contribute to the scientific topics of the evening, I shall direct the attention of the members of the society to a series of interesting cases with the hope of eliciting a full discussion thereon.

CASES OF SEBACEOUS TUMORS OF THE PENIS, SCROTUM, AND HEAD, WITH REMARKS ON THEIR ACCIDENTAL DEGENERATION.

Sebaceous tumors of the prepuce are not very uncommon; similar growths situated along the integument of the penis are much less seldom seen. The tumors when seated upon the prepuce are usually found at or toward its free edge, and present the characteristic globular shape and appearance. Usually there is no difficulty in diagnosis, but I recall one case in which the tumor was pea-sized, and over it the integument reddened and thickened as a result of prolonged coitus and want of cleanliness, in which a diagnosis of hard chancre had been made. A lead lotion applied on absorbent cotton reduced the inflammatory condition, and made the diagnosis of sebaceous tumor easy and certain.

Ulceration sometimes attacks these tumors upon the prepuce, either in the overlying skin or seemingly deep down in the wall of the tumor itself.

* Read before the New York Dermatological Society, May 27, 1890.

As a result, a very obstinate lesion is often produced, which sometimes sorely tries the patience and skill of a physician not well versed in venereal diseases. In one instance the resulting ulcer so much resembled an inflamed chancreoid that a diagnosis of the simple venereal ulcer was made by two competent physicians.

It must always be remembered that nothing less than removal of the whole tumor will result in a cure, and that it must be accomplished with the knife and not by means of caustics, and that the most thorough antiseptics must be employed.

In this connection I may call attention to the fact that it is not uncommon to find, at the preputial orifice, little sinuses which have resulted from the breaking down of small inflamed sebaceous tumors. In some cases a cure may be produced by stimulant injections, but in general it is a good rule to open these little crypts and scrape them out thoroughly. Oedmansson, as you know, has written an interesting paper on this subject.

The eruption called milium is quite commonly seen upon the scrotum, and upon this appendage sebaceous tumors are not infrequently seen. In my experience but one or two such tumors are usually found, and they are most commonly situated near the raphe, or near the part where the skin of the penis merges into the scrotum. These tumors are of varying size according to their age. I have most times noted that they were of slow growth, and exceptionally I have seen them develop to a goodly size in a few months.

The water-color drawing which I now show was taken in 1887, and shows twenty-four large and small tumors on the anterior and outer sides of the scrotum of a young man of twenty-five years. There were two large tumors on the posterior wall. These tumors appeared and grew within a period of three or four years in crops of several at a time. They caused no inconvenience, except a sensitiveness in the mind of their bearer lest they should be seen by his fellows. Under cocaine and thorough antiseptics these growths were painlessly excised and enucleated, and healing took place without pus or inflammatory reaction. (See figure No. 1.)

The following cases are of much interest, as showing what errors of diagnosis may be made in the event of sebaceous tumors having undergone inflammatory degeneration :

A man, aged twenty-four, had in 1874 noticed for several years a swelling behind his left ear, on the line where his hat-band had pressed. This swelling grew and became inflamed, and formed an ulcerated mass of the size of a walnut which was surrounded by much eczema. In this state, and owing to its rebelliousness to remedies, it was pronounced by several physicians to be cancer, and by one to be a gumma, though there was no history of syphilis. After coming under my care, soothing remedies were used to allay irritation, and a cure was produced by extirpation of the glandular mass, followed by iodoform dressing.

In 1883 a man, aged twenty-three, came to me with an ulcerated mass on the anterior wall of the scrotum near the raphé and under the penis. There was no history of syphilis or of suspicious intercourse for several years. The history of the case is as follows: Patient had for more than a year noticed a

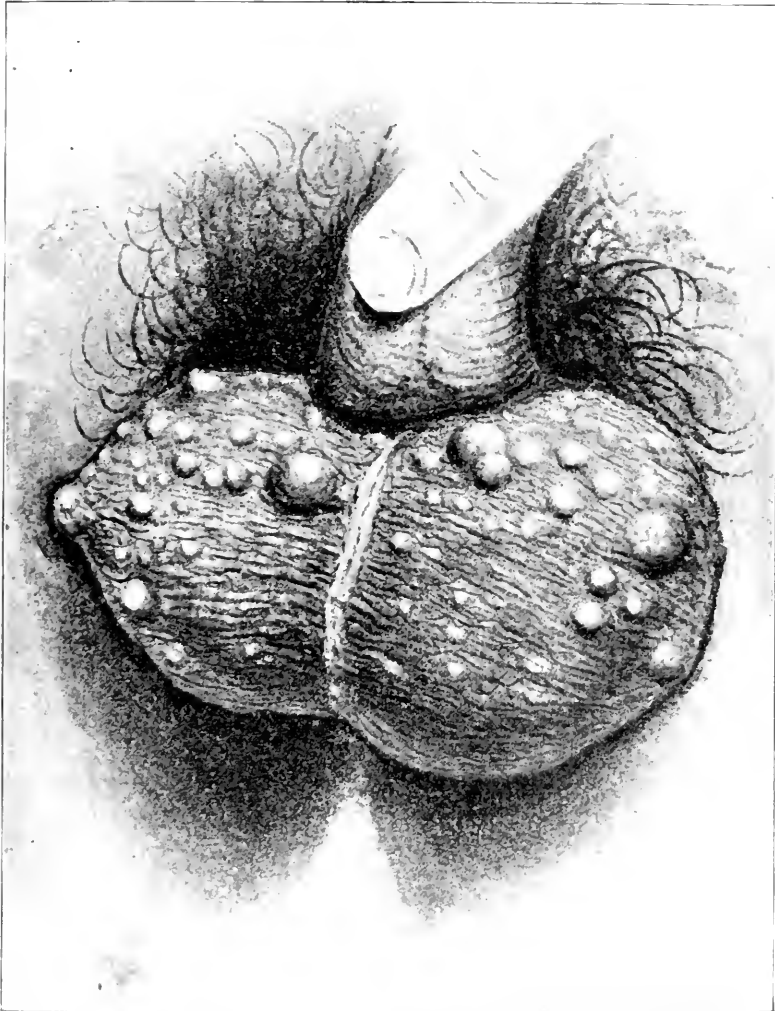


FIG. 1.

movable pea-sized tumor, which had given him no pain or uneasiness. During very hot weather and a long journey the little mass became inflamed, and was by one physician regarded as a furuncle. After a time the redness and swelling nearly disappeared, but soon returned with greater intensity. The man was treated with active cauterants and by applications of mercurial

ointment. In addition, the lesion having been pronounced by a surgeon a hard chancre, mercurial treatment had been ordered. Under these circumstances he came under my observation. On examination, I found a hard, round, quite sharply circumscribed tumor, not freely movable, and surrounded by considerable inflammatory œdema. The surface of the mass was flat and smooth, covered with a dirty brown glazed necrotic tissue, which extended smoothly into the inflamed surrounding tissue. To the eye, at first glance, the appearances were suggestive of a large initial nodule undergoing superficial necrosis. There was not a very profuse discharge of pus from it. There was no enlargement of the inguinal ganglia, nor had any general manifestations of syphilis shown themselves, though the lesion had been in the condition described nearly three months. A few days' rest and the application of a weak carbolic solution prepared the parts for operation. Excision of the mass was rendered more difficult than is usual in cases of sebaceous tumors by reason of adhesions, but it was satisfactorily accomplished. In three weeks a scar three quarters of an inch long remained upon the site of the supposed mammoth hard chancre. If my memory serves me, Mr. Jonathan Hutchinson, in his clinical lectures on some rare cases of skin diseases, mentions a somewhat similar case to the foregoing.

It is always well to remember that, under all circumstances, excision with the knife, with perhaps subsequent scraping, is the best procedure in cases of sebaceous tumors, and that destructive cauterization should only exceptionally be resorted to.

TWO CASES OF RAYNAUD'S DISEASE.

The Acute Form.—A woman, aged twenty-eight, English, thin, nervous, and sanguineous, noticed, a month before I first saw her in 1872, that the tips of her fingers felt numb. They gradually grew pale and cold, and then black, and in about six weeks the pulps of all the fingers for a distance of half an inch became gangrenous. The line of demarkation appeared slowly, and in six weeks the gangrenous tissue fell off, leaving an unhealthy-looking surface. Healing went on slowly and resulted in a cicatrix at the end of each distal phalanx, leaving the end of the fingers sharply conical with little or no pulp, and the nails nearly half an inch too long and curved like claws. Similar changes took place in the tip of the nose and the lobules of the ears. A conical white cicatrix was left, representing the remains of fully half an inch of the nasal organ, which ended almost in a point. Similar destruction was observed in the lobules.

I saw this woman several years afterward, when she reported that she had not had a renewal of the disease. There was absolutely no deviation in the health of this patient, nor could any history be obtained of traumatism or of exposure to heat or cold. The woman said that she lived largely on buckwheat, and thought, perhaps, that that had something to do with her trouble. The difficulty in threading her needle and of grasping objects were the first signs known to her of the beginning of her trouble.

The Chronic Form.—Mrs. X., aged forty-six, American, married at twenty years of age and has a child now twenty-two years old; she has been a widow fifteen years. In all other respects than her fingers and toes she has all her life been well. She is a thin woman, of nervous temperament and bright intellect. The venules over her face, particularly the cheeks, are very prominent, giving rise to a permanent reddish blush. The only fact known to her which may be of aetiological import is that from her twentieth to her twenty-

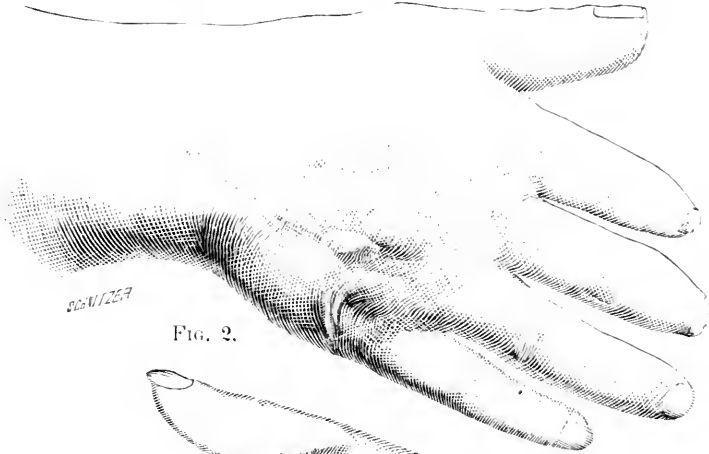


FIG. 2.

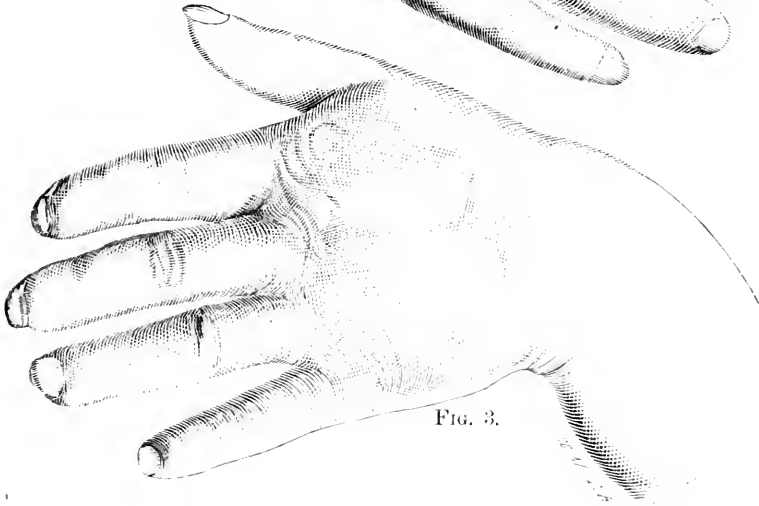


FIG. 3.

fourth year she was an inveterate skater, living, as she says, upon the ice and remaining until very late at night. At these times she says her hands became thoroughly benumbed. About twenty-four years ago—that is, when she was twenty-two years old—she noticed that during her pregnancy her little fingers at the tips began to become blanched and numb, and then became of a deep-red or purple color, and soon the index fingers were similarly attacked. The blanching of the fingers and purplish state was soon followed by ulceration at the tips of the fingers and base of the nails, which became red

and swollen, giving the fingers a bulbous appearance. Within *three* months all of the fingers of both hands were then involved, and the *toes* also, but in a less degree. Thus has the disease progressed for twenty-two years; exacerbations of redness and swelling have taken place at the ends of the fingers and around the nails, and the fingers have gradually shrunk in length. The two index fingers have always been worse than the rest. The patient has suffered much more in winter than in summer. Her sufferings have been great; she has been unable to put her hands freely in water, particularly if cold; she can not sew or play on the piano, so tender are her fingers. The ulcers which formed at intervals were attended with pain, and occasionally, particularly in recent years, small, painful abscesses have formed in the skin in the continuity of the distal phalanges. Sore, tender, and painful during the day, the pain at seasons and times became worse at night, so that her rest has been much disturbed. As the morbid process has crept on, the fingers have gradually grown shorter, the disease being slightly more active in the right hand, in which the deformities are greater than in the left. The drawings (Figs. 2 and 3) show well the condition. Nearly the whole of the distal portion of the thumb, index, and middle fingers have disappeared, leaving conical-shaped fingers, seated on the back of which are small, wrinkled, ill-nourished nails, at the ends and bases of some of which minute fissures form which go on to painful ulceration. On the left hand the destruction is less and the length of the phalanx is greater and the nails are more perfect. Those on the index and ring fingers are very frequently the seat of ulceration and pain. The fingers have a much blanched look and feel cold, presenting the appearance as of having little circulation. The integument is thickened and condensed and firmly encircles the bones. The appearances are much the same as those observed in cases of scleroderma. The integument over the last two phalanges is veritably hide-bound, and can not by any force be pinched into folds, and can only be slightly moved over them by a firm rotary motion. It would seem that a blight came over the woman's fingers and toes twenty-four years ago, from which they have not since recovered. The affection of the toes has not progressed very much during the past five years. All medication has been ineffective. These cases are interesting as showing an acute and chronic form of this peculiar tropho-neurosis.

SARCOMATOUS TUMORS RESEMBLING IN SOME RESPECTS KELOID.

Observing that during the past five years there have been presented to this society skin sarcomata which have shown a marked diversity of clinical appearance, I have thought it worth while to present the photograph and history of a case I saw years ago which manifested appearances I have never seen mentioned in essays or text-books:

The patient was a male, German, forty-three years of age, who was under my observation for several months in 1875 and 1876, and was sent by me to my friend Dr. Briddon's service at the Presbyterian Hospital. About fifteen years before he had been troubled with a wart on the left shoulder, midway between the hip and the neck. In consequence of free recurring hemorrhages, caused by the pressure of his clothes and suspenders, he had the new

growth tied off in 1861. It soon grew again, and was destroyed by his clothes. A third time it reappeared, grew as large as a nut, and was tied off. The fourth tumor of the series was excised by a surgeon, but it grew again, and for



FIG. 4.

the fifth time was quite radically removed in 1875. During all this time the patient's health was unaffected, except from the occasional free loss of blood.

When I first saw him the tumor presented the nodulated, lobulated, pedun-

culated, and irregular appearances shown in the figure (see Fig. 4). It was as large as a man's fist, as dense and resistant as the cartilage of the ear, and, though firmly and deeply seated in the skin, was not adherent to the fascia beneath it. Its color was the peculiar pinkish-red of true keloid, and over its surface very minute capillaries could be seen similar to those of keloid. From gross appearances and without knowledge of the history of the growth, one would immediately conclude that it was an example of a keloid grown to rather unusual proportions. Jutting from the right side of the tumor was a dense, pale-looking, fibrous band, resembling a hypertrophied cicatrix, which ran across the entire neck, being four inches in length. From its upper margin two processes of similar structure came off at right angles, and at their ends were three pale-looking, fibrous masses of the size of a pea. The tumor and its cord-like processes were removed by Dr. Briddon, May 17, 1876. The wound healed kindly within three weeks.

The microscopical examination was made by Dr. Satterthwaite, at that time the pathologist of the hospital, who selected one of the pedunculated nodules. The horny layer was intact, and measured from $\frac{1}{100}$ to $\frac{1}{300}$ of an inch in thickness. The rete Malpighii, from the bottom of the horny layer to the summit of the papillæ, measured from $\frac{1}{200}$ to $\frac{1}{60}$ of an inch. The length of the papillæ varied between $\frac{1}{30}$ and $\frac{1}{30}$ of an inch. The surface of the skin was everywhere intact; the tissue occupying the position of the corium was that mainly of which the tumor was composed. It consisted chiefly of fusiform elements, closely packed together, and formed into bundles in many places. These elements were large, flattened, and fusiform, containing a depressed, rounded corpuscle. These characteristics extended upward into the papillæ: many of them could be isolated, and were seen to have a length of between $\frac{1}{500}$ and $\frac{1}{1000}$ of an inch. The central body had a length of between $\frac{1}{3000}$ and $\frac{1}{2500}$ of an inch. Vessels were numerous, their walls being composed of the same tissue. It was, therefore, from this histological study pronounced to be a fibro-plastic tumor, or spindle-celled sarcoma of the skin. In no section of the tumor or of the fibroid processes were the wavy bundles of fibrillated connective tissue, peculiar to both true and false keloid, found. There was no enlargement of the cervical or axillary ganglia.

The clinical history of this case of spindle-celled sarcoma is extremely interesting. It began as a small warty growth, a not uncommon mode of evolution of isolated skin sarcomata (sarcoma verrucosum of Funk), probably as a result of traumatism, irritation, or pressure. Though removed several times, it promptly returned, and the large mass was formed. From this sprang the fibroid cords and pea-sized nodules, in conformity with what we know of one mode of extension of the sarcomatous process, namely, the development of what Funk calls "daughter nodules" within the infiltration zone.

There was no evidence of a tendency to reabsorption of any of the growths, though it must be added they had only existed in the form depicted in the figure for rather more than a year. Neither was there any sign of central degeneration or of superficial ulceration.

I regret that I was unable to follow the case after the discharge of the patient from the hospital.

A CASE OF CHOLESTERIN TUMOR OF THE VULVA.

The photograph I now present (see Fig. 5) shows an interesting case of pedunculated tumor in a patient now in Charity Hospital. My assistant, Dr. H. R. Heydecker, has kindly prepared the history of the case, and will exhibit to you the specimen:



FIG. 5.

The patient was an Irishwoman, aged forty-seven, strong and healthy, and the mother of one child. She had never suffered from any venereal disease. She entered Charity Hospital complaining of pains in the back and

abdomen, headache, dizziness, and a muco-purulent vaginal discharge. Hanging from the upper part of the left nympha and præputium clitoridis was a tumor of about the size of a small sickle pear, suspended by a pedicle about two inches in length. The tumor was pinkish-white in color, and resembled the scrotum of a young boy. It was softer than a fatty tumor, and rather more firm than a hydrocele. The woman stated that she first observed a little redness and swelling in her vulva about eight years ago, and that since that date the tumor has slowly and painlessly grown until its present size was reached.

When this tumor was opened an odorless liquid, thick as tar and of a dark greenish-yellow color, slowly escaped. It was then found that the walls of the tumor were about as thick as those of a scrotum. My friend Dr. Van Gieson examined specimens of this liquid, and pronounced it to be composed of cholesterolin. I do not recall a similar case in literature, so that this one is of interest owing to its rarity.

DISEASES OF THE NAILS.

By JOHN V. SHOEMAKER, A. M., M. D.,
Philadelphia, Pa.

(Continued from page 344.)

IN gout the nails are apt to become fragile and manifest a tendency to break and scale. They lose their luster and polish. Eczema and psoriasis of the nail likewise occur as a result of gout.

At the London Pathological Society, Dr. Wilks* showed drawings of the finger nails of a man, aged fifty, who sailed for America, August 28, 1887, and returned October 18th of the same year, being sea-sick for three days in each passage. Two furrows subsequently appeared on his nails which exactly corresponded with the dates of his sea-sickness. Dr. Wilks had described the production of these furrows in a paper published about twenty years ago. The furrow is shallow when near the lunula, and difficult to identify, but it reaches the middle of the nail about three months after an illness. Dr. Wilks's original memoir was published in the *Lancet*, January 2, 1869. He inferred that since, upon the average, two full nail growths occurred in a year, therefore a furrow upon the middle of a nail would point to an attack of illness three months previously. He mentioned a case of severe diarrhoea, accompanied by much prostration, which left such a groove upon the nail.

Dr. Langdon Brown communicated to the Pathological Society, in 1870,† the case of a man who had two distinct sets of transverse white lines after two attacks of great prostration and intermittent action of the heart, due to overwork.

* British Medical Journal, March 24, 1888.

† Transactions of the Pathological Society of London, 1870, xxi, p. 409.

All are familiar with the thick, curved, clubbed appearance of the nails so frequent in tuberculosis. In scrofulosis they are sometimes deeply grooved, enlarged, and of a firm, horny consistence.

The white spots, variable as to size and distribution, which are so frequently seen upon the nails are indicative of depressed nervous force, whether the result of exhausting disease, dissipation, sexual excesses, overwork, or anxiety. They may also be due to local injury. They are sometimes so large and disfiguring as to lead the subject to seek medical advice. A very unusual case of this kind was the subject of a paper read by Dr. Robert B. Morison,* of Baltimore, before the American Dermatological Society at their meeting in 1887. These spots originate in the lunula, and are pushed forward, in the growth of the nail, to its free edge. Dr. Morison's patient was a young woman, aged twenty years, under treatment for acne of the face, who called his attention to her finger nails. White bands, one sixteenth of an inch in breadth, stretched across the nails from border to border. The nails were smooth, lustrous, and in every other respect well formed. The patient was very pale, but in fairly good health, and had had no acute illness. The white bands had been appearing regularly for several months. They always began under the skin in the lunula, and remained without change of situation or color until they reached the free edge. Inquiries as to the cause of this condition were without result. During the preceding summer they had nearly disappeared, but had returned with colder weather. She did not play the piano or follow any occupation capable of injuring the nails. The toe nails were unaffected, the hair blonde but not gray. So extensive an implication of the nail is nowhere else described.

Sections of the affected nail were examined microscopically in the Johns Hopkins laboratory under the supervision of Professor Welk. The white lines were cut through at right angles. By direct light the lines appeared to be of a pure white, while the remainder of the section was dark. Acetic acid, nitric acid, and caustic alkalies caused them gradually to disappear. Canada balsam caused their rapid disappearance. The author, therefore, concluded that the white lines were due to air spaces within the nail. Examination of several white spots in nails taken from other individuals yielded similar results.

The formation of air spaces within the nails is a secondary effect, and is probably caused, as maintained by Dr. R. W. Taylor, by fatty degeneration of cells with subsequent absorption of the fat. After absorption the horny nature of the tissue would prevent closure of the cavity, which would then remain filled with air.

* Leucopathia Unguium, a Peculiar Affection of the Nails. By Dr. Robert B. Morison, of Baltimore, Md. *Medical News*, October 8, 1887; *Journal of Cutaneous and Genito-Urinary Diseases*, December, 1887; *Vierteljahresschrift für Dermatologie und Syphilis*, 1888, xv, p. 3.

ONYCHIA MALIGNA.—This is a specific inflammation of the nail-bed, usually considered to be a local form of tuberculosis. It was first described * by Monteggia in 1804, but obtained its name from Wardrop.† The characteristic inflammation is preceded by more or less pain for two or three weeks. A swelling of the bed is then perceived beneath the free border. The redness and swelling increase, and eventually terminate in the formation of an obstinate ulcer, located at first beneath the free border, but extending gradually backward toward the lunula, until at last the whole bed and matrix are involved. The ulcer is of a fungous character, bleeds easily, and gives rise to a very fetid, sanious suppuration. The nail is dry, brownish or black, gradually becoming loosened as the ulcer advances to the matrix. The nail sometimes falls *en masse*, at others in fragments. In other cases, again, it may remain and even grow, although, as a rule, it grows badly as to form and direction. It is apt to assume a vertical position. Sometimes it becomes thickened or curved. The last phalanx acquires a characteristic bulbous appearance. The integument surrounding the nail is hard, shining, and livid. The affection is very obstinate, and manifests no tendency to heal. It may continue for years, and lead to suppurative lymphangitis and lymphadenitis. It generally attacks children of less than ten years of age. Onychia maligna is not very common, since Mr. Thomas Smith, in Holmes's System of Surgery, speaks of observing only nine cases among 7,000 out-patients. Professor Rizzoli found, upon microscopical examination, that the under surface of the nail, instead of being smooth, was roughened by an accumulation of nucleated cells. The phalangeal bone may become involved, but is not generally attacked. Usually it is a finger nail that is the seat of disease. Wardrop succeeded in curing the affection by means of mercury used internally and externally. As others, however, did not meet with the same success, it came to be believed that his cases had been, in reality, manifestations of syphilis. Subsequently, onychia was subdivided into scrofulous and syphilitic by Dupuytren and St. Germain.

Recently Dr. Morvan‡ has questioned the tubercular origin of the disease upon the ground of his study of thirteen cases. Of this number, with one exception, all the patients were children; with one exception, a finger nail was the seat of the disease. In but four or five cases could he detect any scrofulous or tuberculous taint. Nine of the cases were of traumatic origin, while two others were preceded by a subungual abscess of un-

* Beziehung der Tuberculose zur Onychia maligna. Von Dr. Edward v. Meyer. Archiv f. pathologisch. Anatomie u. Physiologie u. f. klin. Medizin, 1887, p. 382.

† An account of some Diseases of the Toes and Fingers. Medico-Chirurgical Transactions, vol. v, 1814, p. 135.

‡ De l'onyxis malin et de son traitement par l'iodoforme. Par le docteur Morvan (de Lannilis). Gazette hebdomadaire de médecine, Paris, 1888, ii, 28.

known origin. Von Meyer, in his article, reported a case from the Heidelberg clinic. The toe was affected, lymphadenitis followed, and a tubercle very suggestive of lupus developed. He believes that a tubercular predisposition underlies the malady, the exciting cause, however, being generally a traumatism. This view is in close accordance with the recent researches and conclusions as to the localization of tuberculosis after injury, as, for instance, in the joints.

Constitutional treatment will generally be found advisable. Dupuytren and St. Germain sliced off the nail-groove and scraped the matrix. Yet they had instances of recurrence. Vanzetti removed the nail and covered the ulcer with powdered nitrate of lead. Billroth also used nitrate of lead. Rizzoli preferred bromide of potassium, which he thinks relieves the pain and promotes the growth of a better nail, though the time occupied by treatment is about the same as with nitrate of lead, viz., two or three weeks. Morvan praises the action of iodoform, which mitigates suffering and stimulates repair. His method is to raise the nail, the patient being under the influence of local or general anaesthesia, to cover the nail-bed with finely powdered iodoform, and retain it by means of cotton and bandages. He found that boric acid failed to replace iodoform. He cured his cases, upon the average, in seventeen days—some in as short a time as from five to seven days, others not until from thirty-one to forty days had elapsed.

SYPHILITIC DISEASE OF THE NAIL.—The nails not infrequently suffer in syphilis. They may become involved at any time after the constitutional symptoms have been established. One of the earliest manifestations is separation of the nail. From perverted nutrition it may gradually loosen and fall, unattended by any inflammatory appearances or pain. The nail may be separated in its entirety or only a portion of it may be shed. The process begins at the free edge and extends backward toward the lunula. The affected portion is of a dark color. The nails of the fingers are most frequently attacked. One nail or several may be involved. A healthy nail is usually reproduced.

Another form, which may occur during the secondary period, seems to be of trophic rather than inflammatory origin. This is *onychia sicca*, friable *onychia*, or *onyxis craquelé*, as it has been termed by Fournier. It principally affects the finger nails. The nail loses its polish and color, becomes yellowish, dry, thickened, and brittle, and very readily splits or breaks. The surface is rough and fissured and the free edge transversely ridged.

A hypertrophic *onychia* is described by Fournier. The nail acquires an immense thickness, becomes grayish or yellowish, rough, and furrowed. Dr. Vajda read a paper * before the eighth International Medical Congress,

* *Onyxis hypertrophica syphilitica*. By Dr. Vajda, of Vienna. Congrès périodique international des sciences médicales, 8^{me} session, Copenhagen, 1884.

in which he described a case the like of which he was unable to find in literature. The patient was a syphilitic child of syphilitic parents. The nails at first appeared speckled, which condition, under the microscope, was seen to be due to a splitting of the young nail substance into undulating fibers or lamellæ. This disposition seemed to depend upon a corresponding wavy arrangement of the nail cells. The condition either persisted or went on to cheesy destruction or psoriasis. The cheesy degeneration resulted from a very remarkable alteration of the nail cells. A hypertrophy of the nail cells was accompanied by a circumscribed proliferation of nuclei and round-cell formation. This condition of the nail corresponded to the accumulation of proliferated syphilitic papules in the epithelial layer observed and described nine years previously by Vajda. In the nails, however, the nail cells, without a simultaneous division of nuclei, soon became, either uniformly or under the appearance of a granulation or secretion, hypertrophied into a semi-fluid substance which took the form of a globular mass disposed around the nuclei, while in the periphery of the cells vacuoli were present.

The picture of psoriasis represented a slighter grade of the disease, or a retrogressive stage in which occurred an enormous transformation of rete cells, with or without vacuolation, into corneous or epidermic cells.

The formation of vacuoli in the cells of the nail-bed is not in itself an abnormal process, though it is much more limited. The cells of a healthy matrix are never vacuolated.

An enormous hypertrophy and cell infiltration of the papillæ of the nail-bed was present. The papillary hypertrophy was the cause of a massive thickening of the nail.

The participation of the young nail substance in the pathological process, as well as the whole course of the affection, serve to distinguish it clearly from ichthyosis, eczema, or favus.

Bumstead and Taylor* speak of "an affection of the nails of which we have seen but two well-marked instances in men suffering with syphilitic cachexia, which seems to be a local necrosis. The nail becomes opaque and whitish in spots the size of a pin-head. These spots, of which there may be from two or three to ten, are formed by depressions of the surface of the nail, which finally reach the matrix, leaving minute and sharply cut holes."

Perionychia occurs in syphilis under two forms, one of which does not, while the other does terminate in ulceration. The non-ulcerative form may attack either side of the border of the nail or may be limited to the lunula. The border becomes thickened, scaly, and of a dull-red color. If the condition persists, the nail loses its luster, assumes a grayish hue, and transverse furrows make their appearance. In the ulcerative variety,

* The Pathology and Treatment of Venereal Disease, 4th ed., p. 579.

the inflammation likewise may be limited or may involve the whole root. If it attack the matrix, the nail is shed, either in whole or in part. In severe cases, the matrix and entire phalanx become swollen. Both forms of syphilitic perionychia are indolent in their course. The ulcerative form gives rise to considerable pain.

(*To be continued.*)

Society Transactions.

THE TENTH INTERNATIONAL MEDICAL CONGRESS.

SECTION IN DERMATOLOGY AND SYPHILIS.

REPORTED BY S. POLLITZER, A. M., M. D.

PERHAPS the largest body of medical men that has ever been gathered together assembled at the Tenth International Medical Congress held in Berlin, August 4 to 9, 1890. The list of members comprised 5,737 names, of whom 2,918 were accredited to Germany. Of foreign countries, the United States sent the largest number, 659; Russia following with 429; Great Britain and Ireland next with 358; Austro-Hungary, 262; France, 179.

The following gentlemen constituted the Committee of Organization for the Section in Dermatology and Syphilis: Dr. O. Lassar, chairman; Messrs. Caspary, of Königsberg; Doutrelepon, of Bonn; Köbner, of Berlin; Lesser, of Leipsic; Lewin, of Berlin; Neisser, of Breslau; Unna, of Hamburg; and Wolff, of Strasburg.

Of these, Messrs. Neisser, Unna, and Wolff constituted an executive committee. The following gentlemen acted as secretaries to the Section: Messrs. Bender, of Düsseldorf; Dubois-Havenith, of Brussels; Pollitzer, of New York; Pringle, of London; Róna, of Budapest; O. Rosenthal, of Berlin; Schiff, of Vienna; Taenzer, of Leipsic; and Valdes-Morel, of Santiago, Chili.

After the ceremonies of the first Plenary Meeting of the Congress in the morning, the Section in Dermatology and Syphilography met and organized, with Dr. Lassar in the chair. An address of welcome on the part of the German dermatologists was made by Professor Caspary.

Theme I. Treatment of the Inflammatory Affections of the Skin.—DR. LASSAR, in introducing the subject, apologized in advance for the shortcomings of his paper, on the ground of his occupation with the business of the Congress, of which he was Secretary-General.

There were great differences of opinion as to the best methods of treating the inflammatory skin diseases. The clear views of the elder Hebra had been necessarily modified by the facts of later pathological research. We were beginning to learn something of the causes of skin diseases, and a rational treatment had to be modified accordingly. A familiar example was to be found in the case of sycosis, the treatment of which to-day was based on our knowledge of its parasitic causation. As to eczema, the inflammatory disease

of the skin, we have not made much progress in our knowledge of its cause or causes, and our treatment of it may still be regarded as in an experimental stage. Diachylon ointment, the preparations of tar, etc., have been found by all to fail in certain cases. In these, the stronger remedies—like pyrogallol, which we have been taught to use only with the greatest caution—may yield excellent results. So, too, has it been the custom since Hebra's time to avoid water in the treatment of acute inflammatory conditions; but the speaker had himself done something toward showing that not only was water not injurious, but that baths are often of the greatest benefit in these conditions in the treatment of an acute eczema.

The reading of the other papers on this subject, together with the discussion, was postponed till the presentation of Theme IX, Eczema, but the Section adjourned before this theme was reached.

Theme II. Diagnosis, Prognosis, and Treatment of Chronic Gonorrhœa in the Male and the Female.—Papers were read by MESSRS. FINGER, of Vienna; SINCLAIR, of Manchester; JULLIEN, of Paris; NOEGGERATH, of Wiesbaden; and CAMPANA, of Genoa. In the discussion, MESSRS. O. ROSENTHAL, of Berlin; NEISSER, of Breslau; ZUELZER, of Berlin, and others took part.

DR. F. KRAL, of Prague, read a paper on **The Fungus of Favus**. The difficulty in the way of the study of the parasites of the skin lies in procuring pure cultures. To overcome this difficulty, the speaker adopted a method which yielded excellent results: the favus crusts were rubbed up with sterilized sand, and thus finely divided; plate cultures were then made and the fungus isolated. In this way the development of the fungus could be traced, step by step, from a single spore. The results of these studies are: 1. The favus fungus is always one and the same fungus, and identical with that described by the author in a recent number of the *Arch. f. Dermat.* 2. This fungus is morphologically and physiologically (in cultures) different from the fungus heretofore regarded as the fungus of favus. 3. Its pathogenicity for man is established through successful inoculations. 4. With the fungus from the scalp, typical favus of the body was produced. 5. In the experimentally produced favus, the fungus described was always the only fungus present.

The next paper was by DR. POHL-PINCUS, of Berlin, on the **Study of the Human Hair by Polarized Light**.

DR. PRENTISS, of Washington, read a paper on **Change in the Color of the Hair, due to Use of Pilocarpine internally**.

Theme III. The Nature of the Drug Eruptions.—DR. UNNA, of Hamburg, in presenting the subject, remarked that but little could be expected from a general discussion of so difficult and complicated a question unless the discussion were limited to certain definite lines. He had, therefore, presented the following special questions, each of which was to be considered separately:

1. Are the diffuse spreading erythematous and vesicular eruptions following circumscribed local application of certain drugs (iodoform, sublimate, etc.) to be placed in the same category as the general eruptions following the internal use of the drugs?

2. Are the iodine and bromine acneiform eruptions to be regarded as due to the excretion of these drugs through the sebaceous glands?

3. Are the "dynamical," indirectly produced eruptions (Behrend) to be grouped with the directly produced specific exanthems?

DR. COLCOTT FOX, of London, introduced to the Section the first sub-question: He analyzed all the recorded cases of iodoform dermatitis and compared them with similar eruptions arising from the external application of sublimate and other mercurial preparations—arnica, chrysarobin, belladonna, etc.—and proposed the following classification:

Group I. Localized eruptions strictly limited to regions with which the drug has come in contact, and directly due to a purely local non-specific action, without any systemic reaction.

Group II. Localized eruptions, but less strictly limited to the site of application of the drug, accompanied or not by systemic reaction. These include: (a) Eruptions distributed over a limited zone or areola around the site of application of the drug. (3) Eruptions spreading from the site of application of the drug over a more or less extensive surface continuously, like water in blotting-paper.

Group III. More or less widespread or generalized eruptions, with or without coincident systemic reaction. These include: (γ) Local spreading eruptions and subsequent evolution of remotely situated areas, which may join together, and with the original spreading patch to cover a wide area. (δ) Eruptions constituted by the evolution of patches, beginning either near the site of application or remotely in several places.

The author believed that the eruptions included in Group I were of non-specific origin, purely local, due to the irritant action of the agent, and similar to eruptions arising from the application of lime, sugar, or mustard. Those of Groups II and III were partly of the same nature, and partly due to a specific action of the drug. In the more limited eruptions around or spreading from the site of application of the drug, the peripheral nerve ganglia, and in the generalized eruptions the more central ganglia are affected. The generalized eruptions are, therefore, of quite similar causation to those arising from the ingestion of drugs.

DR. H. G. BROOKE, of Manchester: The object of the paper was to discuss the question as to whether the "dynamic" eruptions of Behrend are to be separated completely from those which he called "specific." There must be some means of accounting for the curious way in which the angeioneurotic eruptions produced by so many drugs are limited to so small a number of exanthems. In this process idiosyncrasy plays the chief rôle, and the process of limitation must depend on the peculiarity of the individual. Behrend explained this by the action of certain substances which he supposed were created by the working of the drugs in the body, and which produced these eruptions by a "dynamic" action, different drugs giving rise to different toxins in different individuals. There is, however, another explanation possible. Putting aside the purely inflammatory conditions and new growths, the great majority of the eruptions are angeioneurotic.

In order better to understand their mechanism a comparison may be made with the actions of drugs on the heart, which are more easily investigated. We find that certain drugs have an almost constant effect on the heart—*e. g.*, digitalis; others in which the selective action is less marked and less con-

stant—*e. g.*, nicotine ; and others again in which the action is so slight and uncertain as to be unpredictable. We thus have a descending series from those which are specific to those which are purely cases of idiosyncrasy.

This comparison may be transferred to the skin, and we find that certain drugs have a specific effect, like amyl nitrite, which has a well-defined connection with the vaso-motor center of the face. In the second class we have belladonna, hyoscyamus, and stramonium. In the third class, which make up the bulk of the angeioneurotic drug eruptions, the effect varies in every individual—for example, the eruptions caused by quinine, chloral, and antipyrine. The variations in the exanthems (topography, intensity, and duration) are explicable by the physiological differences of function of the nerve-centers and nerve terminations in the skin. The eruptions produced are common or rare, universal or circumscribed, intense or weak, according as to whether the sensitiveness of that particular portion of the nervous system, which is easily affected by particular drugs in the majority of people, or whether it is a peculiarity only to be found in a few. There seem to be, therefore, no clearly defined differences between Behrend's two groups.

The limitation in the number of drug eruptions is not explicable by the nervous system of the skin alone. The combined influence of the skin vascular system and its nervous supply can only produce hyperæmia. The rest of the variations are produced by the idiosyncratic peculiarities of the various tissues of the skin in which they lie. Thus a simple *erythematous* eruption becomes *vesicular* or *bullous* when the resistance of the epithelium is very slight ; when a spastic element concurs it becomes *papular* or *urticarial* ; when a passive venous condition supervenes we have *purpuric* rashes or *œdema*.

This explanation renders unnecessary Behrend's supposition of the formation of new substances in the body. The influence of the drug is exerted directly first upon the nervous system, and secondly upon the skin itself. Thus the inflammatory conditions which persist after the acute stage (*e. g.*, after quinine) is due to the direct influence of the drug upon the tissues of the skin.

Discussion.

PROFESSOR NEUMANN, of Vienna, said that in Vienna the iodine eruptions had long been known, but the bromine eruptions were not recognized till a relatively more recent period. He had himself published one of the first Vienna cases in 1876. Before this time these eruptions had generally been diagnosticated as syphilitic. The importance of a knowledge of the drug eruptions was clear, from the fact that serious consequences might often arise from mistakes in diagnosis. As to the physiology of these eruptions we knew very little. Though some of them were chemical in their causation, others were due to pathological reflexes. Thus he had seen urticarial eruptions on the skin in connection with aphthæ in the mouth and vagina.

DR. RADCLIFFE CROCKER, of London : The first question, as to whether the generalized eruptions following local external use of a drug were to be placed in the same category with those following the ingestion of a drug, he would answer with an emphatic "No." The second question, as to whether the iodine and bromine acneiform eruptions were due to the excretion of

these drugs through the sebaceous glands, he would also answer in the negative, for sebaceous glands were not necessary for their occurrence. He had seen bromine eruptions occurring on the sites of old scars, such as vaccination scars and those from burns, etc., where, of course, the sebaceous glands had been destroyed. He had missed in the papers read any mention of the underlying cause in the production of the generalized eruptions, namely, defective elimination through the kidneys, which was usually present. As to the third sub-question, he believed that the so-called dynamical eruptions were generally the result of reflex irritation, proceeding from the stomach or intestinal tract.

PROFESSOR LELOIR, of Lisle, contributed to the discussion an account of three cases of rare forms of drug eruptions: 1. A potassium-iodide eruption, resembling scabies in appearance, distribution, and symptoms. 2. A sodium-salicylate eruption, resembling urticaria gigantea. 3. A sulphonal eruption, a diffuse erythematous and macular eruption, situated chiefly on the thorax and back, resembling roseola syphilitica.

PROFESSOR PETERSEX, of St. Petersburg, narrated a case of an extensive erythematous and macular eruption following half an hour after an injection of calomel (for syphilis). The eruption faded in the course of a few days. A second injection, a week later, was followed by a similar but much less severe eruption. A third injection failed to produce the exanthem. A series of injections with hydrarg. ox. flav. in the same patient was followed by a similar train of cutaneous symptoms.

DR. BEHREND, of Berlin, desired to explain what he had meant by the term dynamical in connection with drug eruptions. He had referred to those eruptions which were produced by drugs not in virtue of their physiological effect, but through some accidental element in their action, the drugs acting as foreign bodies.

PROFESSOR JANOVSKY, of Prague, believed that many eruptions had been ascribed to drugs when in reality the drug itself had nothing to do with the production of the eruption. He had recently seen a case of an erythematous and urticarial eruption following an injection of thymol-mercury for syphilis. By way of experiment, he injected into the same patient some pure paraffin oil, and the injection was followed by just the same eruption as that which followed the injection of the mercurial preparation.

PROFESSOR EHRLICH, of Vienna, was of the opinion that there must be some pathological change in the blood-vessels at the foundation of all these eruptions.

PROFESSOR KÖBNER, of Berlin, would divide the class of drug eruptions into two groups: *a*, those which were true idiosyncrasies and might be produced by minute doses of the drug; and *b*, those which were common, requiring, like iodine and bromine, large doses of their respective drugs, and were developed slowly. The study of the drug eruptions was of great importance from its bearing on the pathogenesis of skin diseases.

PROFESSOR KÖBNER, of Berlin, **Demonstration of a Case of Idiopathic Multiple Pigment Sarcoma (Kaposi).**

DR. LUSTGARTEN, of New York, **Demonstration of Microscopic Sections from a Case of Psorospermiosis (Darier).**

The Causes and Origin of Leprosy.—MR JONATHAN HUTCHINSON, of London, began his remarks by reading the following propositions : Leprosy is everywhere the same disease. The discovery of the lepra bacillus has made the problem of the cause of leprosy much more simple. It is certain that the bacillus must be received into the body either by direct contagion or in the form of food. It is certain that neither contagion nor hereditary transmission take any important part in the spread of leprosy. Englishmen who have acquired leprosy abroad may return home and live among their friends without risk of communicating the disease. Englishmen who, without any possibility of inheritance, go to reside in leprosy districts, may become lepers and without any known exposure to contagion. It is clear, then, that the bacillus of leprosy must in almost all instances be received in the form of food. The only kind of food open to suspicion in all the various regions where leprosy is endemic is fish. The statements adverse to the fish-hypothesis of leprosy will probably in the future be found to depend upon errors in observation.

He next exhibited a number of drawings illustrating the erythema stage of leprosy. He contended that there were no really separate forms of the malady; that all leprosy began as an erythema, either in patches or diffuse, and that the so-called tubercular form was usually a later stage, and occurred chiefly in severe cases. He called attention to the distinction between two kinds of anæsthesia—one which began in the skin itself and was a sequel to erythema, and the other which was due to neuritis. The latter was always distributed according to the known regions of nerve supply; the former had no relation to them. The one (that of neuritis) was usually complete, the other not nearly so. They stood in the same relation to each other as retinitis and optic neuritis in the case of amaurosis. He insisted that some authors had used the term anæsthetic leprosy as applicable to one form, others to the other; but for him all leprosy was necessarily anæsthetic, and, although many cases never pass into the tubercular stage, none escape that of anæsthesia. He believed that the first manifestations were usually in the skin, and it was there that a form of ascending neuritis began, which, passing up to where sensory nerves joined motor trunks, caused implication of the latter. In this way muscles became affected.

He next passed to the consideration of the probable causes of leprosy, and, having insisted that the malady was the same in all countries, urged that it must have a uniform cause. In his opinion, the only explanation which would meet this universal application was to believe that the bacillus causing the disease was received into the body with food in the form of fish—usually salted fish.

As to the contagiousness of leprosy, in the ordinary sense, a vast deal of the supposed evidence in its favor is invalidated at once if we accept a suspicion that the poison may be received in connection with food. One of the chief arguments of the contagionists is that leprosy had died out in many countries as the result of isolation measures. This argument is based on a misconception of the facts; isolation, though attempted, was never carried out with sufficient thoroughness to be of much avail for the extinction of a contagious disease.

Mr. Hutchinson then touched briefly on the question of the heredity of leprosy, and the supposed facts in its favor were shown to be unreliable and deductions from them fallacious. The same facts might apply equally to the food or the contagion theory. The strongest argument against heredity was to be found in the fact that in the Norwegian immigrants in North America the disease has almost disappeared.

The speaker next proceeded to the main point of his discourse, namely, that the poison of leprosy is introduced into the system in the form of fish. The fish-hypothesis by no means presupposes that large quantities of fish are eaten; a small quantity may be sufficient, or even a single morsel if it contain the bacillus. It is possible that fish may cause the disease in one of two ways: Either by the direct introduction of the bacillus into the stomach, or it may be that fish food rouses into activity a bacillus already existing in the tissues. The first seems more probable, though a fish diet may further favor the development of the bacillus when once introduced into the stomach. In all ages and in almost every country where leprosy has prevailed fish food has come more or less under suspicion. No other article of food can be mentioned which is in use in all leprosy districts. Most of the places where the disease prevails are on the sea-coast; it is especially prevalent on islands. Wherever a community is to be found which subsists chiefly on fish, there leprosy is present. As to the evidence against the theory, based on the alleged fact that members of castes in India (among whom leprosy prevails) are forbidden to eat fish, the speaker had repeatedly been assured that the interdiction as to animal food did not apply to fish, or that, at any rate, it was not observed. Far inland, where fish was scarce, it would probably be received in just its most dangerous form of decomposition.

Discussion.

DR. ARNING, of Hamburg: As to the Hawaiian Islands, the natives there had always been fish eaters, and leprosy was a comparatively recent affair. It had been stated that leprosy existed from time immemorial in the Sandwich Islands, but he had been able to obtain some strong evidence to the contrary. The bones of past generations of Hawaiians were religiously preserved in caves with a record of the generation to which they belonged. The speaker had obtained access to these collections and examined many scores of skeletons without ever finding a trace of the very characteristic lesions of the bones made by leprosy. From his own investigations he was satisfied that leprosy was introduced into Hawaii during the present century. Furthermore, the Chinese in the Sandwich Islands, who notoriously ate all manner of sea products, and frequently without cooking, were relatively free from leprosy. It is true that preserved fish had been introduced into the Sandwich Islands within the last thirty years, and was eaten by the natives. But the disease occurred among the Europeans on the islands, who did not eat raw fish.

PROFESSOR LELOIR, of Lisle, opposed what he characterized as the culinary hypothesis, and said that many foods had at different times been regarded as carriers of leprosy. Leprosy occurred wherever the bacillus was carried by man. In conclusion, he insisted that it was the duty of all nations to take

measures for the most perfect possible isolation of lepers, as was done in Norway.

PROFESSOR PETERSEN, of St. Petersburg, said there were regions in central Siberia where water was so scarce that the inhabitants could hardly obtain enough to drink, and where there certainly were no fish, yet leprosy was found there. As opposing the fish hypothesis he narrated the story of a family of peasants consisting of six members living together whom he had recently visited; two years ago the mother was known to have leprosy; last year the father developed the disease, and now he found one of the daughters showing unmistakable signs of the same affliction. All the members of this family of six had the same mode of life, ate of the same food, etc., yet only three of its members had the disease. Infection in some way other than through their food seemed a more reasonable hypothesis in this case.

MR. HUTCHINSON was much obliged to Dr. Arning for the information which he had given as to the recent introduction of the practice of salting fish into the Sandwich Islands; it was exactly the fact which he had been seeking. Dr. Arning's remark that the Chinese did not suffer in excess of others on the islands was in favor of a food cause and not of contagion. It was true that the Chinese at home did not suffer so severely as the Sandwich Islanders had, but they spread the disease by teaching others to eat uncooked fish, and not by contagion. If the disease were contagious, so careless of cleanliness, etc., were the Chinese that they would all suffer. What had taken place in the Sandwich Islands was now occurring at the Cape of Good Hope also. There a colony of Malay fishermen were engaged in the preparation of salt fish. This fish was sent inland in large quantities, and of those who lived upon it a certain number became lepers.

As to the value of isolation we should remember that the disease was diminishing, or had died out, in places where no attempt at isolation had been made. This was the case in Iceland, on the Baltic, etc., but perhaps the best modern example was New Zealand. From New Zealand, where the disease had formerly prevailed among the Maoris, it had almost wholly disappeared since the introduction of English civilization with English food. Such facts were wholly inconsistent with the idea of direct contagion, and proved that isolation was unnecessary.

DR. ABRAHAM, of London, referred to Hawtrey Benson's Dublin case, which Mr. Hutchinson had not mentioned; also to Thologan's facts, that in the Koordistan Mountains no fish were found, yet leprosy occurred.

PROFESSOR KAPOSI, of Vienna, believed that the divergencies in the theories had arisen because of the very slight degree of contagiousness of leprosy. In this respect we might draw a parallel with pityriasis versicolor. In the latter we knew the germ thoroughly, and no one questioned the contagious nature, however slight, of this affection. Yet attempts at inoculation have generally failed, and, from the clinician's point of view, the disease was practically non-contagious.

Theme IV. To what Special Conditions is the Occurrence of the Tertiary Forms of Syphilis to be ascribed?

Theme VI. The Treatment of Syphilis: 1. The Results of (a) Excision; (b) of the Abortive Treatment of the Primary Lesion. 2. Commencement,

Duration (Continuous, Intermittent, or Temporary ?) of Constitutional Syphilis.

Theme VIII. The Special Indications for the Employment of the Various Forms of Mercury in the Treatment of Syphilis.

These questions were gone into so thoroughly in Paris last year that it seems hardly necessary to report the papers read at length.

PROFESSOR HASLUND, of Copenhagen, repeated his valuable table of statistics, based on 5,636 carefully observed cases. Of this number, 616 (about 11 per cent.) were attacked by tertiary syphilis. Of these 616 cases of tertiary syphilis, 189 occurred in patients who had never been treated at all for syphilis, 345 in those who had been treated but partially, and 82 in those who had been treated apparently thoroughly ; 86.75 per cent. of the cases of tertiary syphilis occur, therefore, in those who have not been treated, or treated only in an insufficient manner. The greater number of the remaining 82 cases (3 $\frac{1}{4}$ per cent.) of tertiary syphilides in those who had been treated apparently satisfactorily, were patients who were alcoholics, 34 cases ; or who were suffering from some other chronic affection (malaria, etc.), 6 cases ; or in whom the treatment had commenced late, 13 cases ; or who had been treated by injections of a soluble salt of mercury, 9 cases. As to the localization of the tertiary syphilides, the skin was affected in 343 cases ; the bones in 165 ; the nervous system in 163 ; the mucous membranes in 120 ; the viscera in 27. These figures do not agree with those compiled by Fournier, who found the nervous system relatively more frequently affected ; but Fournier's cases were taken from a different class of patients, including those in his private practice, while the speaker's statistics were based entirely on hospital practice. As to the causes of the localization of the symptoms in one organ rather than another, probably the most important factors are traumatism and irritation. Those parts of the body which are most exposed to casual injuries are most frequently the seat of tertiary syphilis. So also with the viscera ; a previous gonorrhoeal orchitis will determine the location of a gumma of the testicle ; the victim of epilepsy has but a small chance of escaping cerebral syphilis should he become infected. The lungs, however, appear to be an exception to this rule, pulmonary affections playing no rôle in determining syphilis of these organs.

In regard to the treatment of syphilis, the papers read were for the most part mere expressions of opinions, or of individual predilections. Köbner, Diday, and Petersen are opposed to continuous treatment, and favor treating the cases only when symptoms arise. Haslund, Lang, Neisser, and Neumann favor continuous treatment from the beginning. Haslund employs inunctions, Lang injections of the oleate of mercury ; Doutrelepont, injections of hg. salicylate ; Leloir, regularly intermittent inunctions, beginning when the secondary symptoms appear, and continuing for four or five years.

As to the result of excision of the chancre, there was, with the exception of Neumann, who finds excision useless, complete unanimity. All are agreed as to the theoretical possibility of aborting syphilis by the early excision of the initial lesion. It gives the patient at least a chance for a mild syphilis which it is incumbent on the physician to offer him.

DR. E. EILERS, of Copenhagen, read a paper based on an experience of

thirty-seven excisions, in thirty-two of which definite results were obtained. In nine cases the effect was positive, in twenty-three negative. In the nine cases with positive effect the age of the chancre, dating from the time of infection, was less than twenty-one to twenty-five days. In cases in which the chancre has been excised, the course of the syphilitic infection is decidedly more benign; in 89 per cent. of the cases of excision the syphilis is mild, whereas without excision its course is mild in only 64 per cent. As to whether the second period of incubation is prolonged by excision, the speaker expressed a doubt; the average in his cases was fifty days instead of forty-six days, when excision is not practiced. Theoretically the recent bacteriological researches of Bouchard, Chauveau, and others, which show that the number of pathogenic organisms is of great importance in determining the intensity of the infection, affords a strong argument in favor of the earliest possible excision of the initial lesion in syphilis. At the same time we must not lose sight of the uncertainty of the result, and should not promise the patient too much.

DR. ISAAC.—**Demonstration of a Case of Nævus.**

Theme V. The Pathogenesis of Pigmentations.—PROFESSOR CASPARY, of Königsberg, introduced the subject with a review of the work done heretofore, and expressed the opinion that the pigment found in the epidermis is derived from two sources—that carried there by leucocytes, and that produced *in loco* by the rete cells.

PROFESSOR KAPOSI, of Vienna: The question to be answered is, Is the pigment formed in the epidermis produced there, or is it carried by wandering cells, and simply deposited in and held by the rete cells? The chief factor in the production of pigmentations is hyperæmia—whether produced by the influence of the sun's heat, through local pressure, or through nerve action—which favors diapedesis. Pigmentations so produced may be called hæmatogenic. The bronzing of Alpine tourists may be explained similarly as the result of abnormal diapedesis following the hyperæmia due to the sun's heat and the diminished atmospheric pressure. It is necessary for the production of pigmentation that there be intact vessels and papillæ. In xeroderma pigmentosum, where the vessels become obliterated and the papilla disappear, we get the white apigmentary patches. The pigmentation of the nipple during pregnancy may be explained as due to a reflex hyperæmia (from the uterus). It is probable that in the pressure-pigmentations the pigmentation depends on lesions of the capillaries. So in lupus, in syphilis, and in leprosy, we have alterations in the vessels to account for these pigmentations. The phenomena of vitiligo show the connection of the nervous system with the formation of pigmentary changes. The red blood-corpuscles are only one form of protoplasm which has the special function of producing hæmoglobin. Is it not possible that other cells may, under abnormal conditions, take up a similar function? The presence of hæmoglobin, or of its products, is not all that is necessary for the occurrence of pigment in the skin. The blood of albinos contains just as much hæmoglobin as that of normal people. Pigment once deposited in the epidermis is retained in the palisade layer of the rete, under ordinary conditions; in vitiligo, however, it is reabsorbed. A factor of importance is heredity; both pigmentary and apigmentary changes

may be inherited. In conclusion, the speaker expressed the opinion that the hæmoglobin of the red blood-corpuscles is the source of the pigment found in the skin; but not its sole source. There must be other protoplasmatic bodies which can assume a similar function, that of producing coloring matter.

PROFESSOR EH RMANN, of Vienna: The first question to be settled is where, not how, is the pigment formed? The best subjects for these studies are found among the Reptilia and the Batrachia. In the frog, for instance, we find the pigment in the well-known multipolar cells in the corium. These cells can readily be seen to change their forms under the stimulus of light or of chemical action, etc. In man somewhat similar cells may be seen in the corium, generally near the blood-vessels; but the pigment that gives color to the skin is found in the epidermis, and is carried thither by these multipolar wandering cells, which have taken it up from the red blood-corpuscles. These cells may be traced to the epidermis, where their branches may often be seen between the rete cells.

PROFESSOR JARISCH, of Innsbruck, spoke especially of the apigmentary changes. As to Neisser's view that the apigmentary patches in syphilis are due to excessive desquamation together with diminished formation of pigment, Riehl has shown experimentally that there is no greater desquamation in these conditions. Ehrmann's idea that the pigment cells are destroyed at the epidermis-corium border, and so the pigment fails to enter the epidermis, is opposed by the fact that in these conditions we do not find any unusual amount of pigment in this region. Riehl's view that the pigment is carried back by the white blood-corpuscles seems based on better evidence. Kartsch's experiment—transplantation of negro on white skin—has definitely shown at least the possibility of such a reabsorption of pigment taking place. The speaker has seen, in negro skin, pigment masses situated in the corium immediately below pigmentless rete cells, the location of the pigment suggesting the idea that it had gone from the epidermis into the corium. We can not in these studies neglect the blood-vessels and nerves; the symmetry in vitiligo speaks clearly for an association of the nervo-vascular mechanism in the causation of these changes.

Discussion.

DR. KROMAYER, of Halle, believes that we must distinguish two pigments in the skin—that in the corium and that in the epidermis. He does not think that the latter is connected with the former. The multipolar pigment cells in the corium are not mobile, though they may, as in the frog, change their shapes: they are fixed connective-tissue cells. His own studies had shown him that there was one constant change in pigmentary affections—namely, a kind of atrophy of the papillæ—that is, there is a hypertrophy of the elastic tissue accompanied by a disappearance of the nuclei.

DR. BLASCHKO, of Berlin, said it is not true that the pigment remains fixed in the palisade layer, as witness the skin of the negro. As to the absence of pigment in the horny layer, the pigment is readily broken up, and therefore, unless there is a great deal present, we can not find it in the horny layer. He had recently been studying the development of pigment in the sole of young black-white cats, in whom the sole at birth is white. Later,

when pigment begins to be developed, we see the star-shaped pigment cells in the corium before there is any pigment in the epidermis. He can not accept the views of Riehl on pigment resorption. In studying this complicated question we must keep the following facts clearly before us: 1. In vertebrates pigment is formed under the influence of sunlight. 2. Through natural and sexual selection pigmented, non-pigmented, and mottled species and races have been produced. 3. We must distinguish pigment formation, pigment transportation, and pigment disappearance. Pigment is formed near the blood-vessels; it is carried by cells to the epidermis, where it is in part destroyed. Its transportation is, to some extent, under the influence of the nervous system. Complete or partial albinism, or leucoderma, depends on (1) the deficient pigment formation, (2) deficient transportation, (3) incapacity for taking up the pigment on the part of the epidermis.

PROFESSOR ROBINSON, of New York.—**Xanthoma Diabeticorum and its relations to Ordinary Xanthoma.**

DR. SHOEMAKER, of Philadelphia.—**The Influence of Light in determining the Beauty of the Complexion.**

MR. HUTCHINSON.—**Demonstration of Illustrations of some Rare Skin Diseases.**

DR. HAVAS, of Budapest.—**Contribution to the Lichen Ruber Question.** The Paris Congress does not seem to have settled the question of the relations of lichen ruber. Dr. Havas's paper is an account of a case which the speaker had taken from Budapest to Vienna in order to get Kaposi's opinion. Kaposi diagnosed the case as one of lichen ruber, or, what was in his opinion the same thing, pityriasis rubra pilaris (Devergie). The histological examination showed the case to be wholly different in its beginning from lichen planus.

PROFESSOR NEUMANN, of Vienna, is sure that the lichen ruber acuminatus (Hebra) must be accepted to-day, and that it has no connection with lichen planus (Wilson). There are moulages in the Museum Baretta which satisfy the speaker as to the existence of the Hebra type. He is satisfied also that the lichen ruber of Hebra is not identical with pityriasis pilaris of Devergie.

DR. V. HEBRA, of Vienna, has no hesitation in declaring Havas's case to be one of pityriasis rubra pilaris. His father had simply confused the two forms of disease, lichen acuminatus and pityriasis pilaris. In going over the old record of cases in Vienna recently he had been able to separate cases of true acuminatus from those of pityriasis pilaris; one especially which the speaker remembered to have seen in his student days, which his father had diagnosed as lichen acuminatus, was, he was sure, a case of pityriasis Devergie: the more as the affection disappeared and recurred again no less than three times, the patient eventually recovering entirely, a course which we know is not that of lichen ruber acuminatus.

DR. ZEISLER, of Chicago, thought that Kaposi's dictum ought to be conclusive as to the identity of lichen acuminatus and pityriasis pilaris.

DR. BULKLEY, of New York, regretted that a publication of his, several years ago, should have helped to create confusion on this subject in America. Lichen planus, we were all agreed, was different from lichen acuminatus.

There had been some doubt as to whether the latter (Hebra's type) occurs in America; he had himself two or three cases. These were very different from lichen planus, and different also from pityriasis pilaris. He was satisfied that all these forms exist.

DR. SHERWELL, of Brooklyn: There could be no question as to lichen planus; it was relatively a common disease. He had himself seen more than a hundred cases in his practice. Lichen ruber acuminatus of Hebra was, on the other hand, one of the rarest of skin diseases. He had seen only three in America in twenty-two years. Its course was very chronic, terminating in marasmus and death. He did not recognize the photographs nor the description given by Dr. Havas as appertaining to lichen acuminatus; but rather as pityriasis rubra pilaris of Devergie. As to the relations of these affections, he thought that lichen acuminatus and pityriasis pilaris were entirely distinct affections; and he had never seen any evidence that lichen planus and lichen acuminatus were related.

DR. JADASOHN, of Breslau, narrated for Professor Neisser two cases of lichen ruber acuminatus which had recently been observed in Breslau. They could not be differentiated, in Neisser's opinion, from pityriasis rubra pilaris.

DR. CROCKER, of London, exhibited drawings of a case of lichen planus of the soft palate.

DR. ROBINSON, of New York, was of the opinion which he had expressed three years ago, that lichen planus and acuminatus and pityriasis pilaris are distinct affections.

DR. HAVAS, of Budapest, in summing up, reiterated his opinion that pityriasis rubra pilaris and lichen ruber acuminatus (Hebra) are identical, and that they bear no relation to lichen planus.

The next (eleventh) International Medical Congress will be held in 1893 at Rome.

12 WEST FORTY-SIXTH STREET.

Book Reviews.

International Atlas of Rare Skin Diseases. Editors, MALCOLM MORRIS, London; P. G. UNNA, Hamburg; H. LELOIR, Lille; L. A. DUHRING, Philadelphia; LEOPOLD VOSS, Hamburg and Leipzig. London: H. K. Lewis, 136 Gower Street, W. C.; Paris: G. Masson, 120 Boulevard Saint-Germain.

IN a previous number of this Journal we announced the proposed publication of an International Atlas of Rare Diseases of the Skin under the joint editorship of distinguished representatives of dermatology in different countries.

We have received the first two numbers of this superb work, and a careful examination of the text and plates fully sustains the high opinion of its

literary and artistic excellence which the reputation of its authors and publishers led us to form.

A systematic plan of arrangement is followed by the writers in the preparation of the text. In the treatment of the different subjects, the histology, course, and treatment of the disease delineated are concisely described, also its ætiology and histology, while the differential diagnosis is considered more fully and at length, the whole concluded by the opinion of the author upon the nature and name of the disease and its proper place in the system of classification. By this schematic plan the essential points are taken up consecutively and in logical sequence, thus facilitating ready reference and rendering the articles more collectively valuable.

The diseases delineated in the first part are Lymphangioma Circumscriptum, by Malcolm Morris; Ulerythema Acneiforme, by P. G. Unna; and Lupus Semi-sclerosus Linguae, by H. Leloir. In the second part, Sarcoma Pigmentosum Diffusum Multiplex, by Ernst Schwimmer; Keratoderma Symmetrica Erythematosa, by Ernest Besnier; Angiokeratoma, by Vittorio Mibelli; and Ulcus Molle Mammæ, by A. Pospelow.

We can not particularize at present the special excellences of the individual plates. They are all admirably executed and are superb specimens of the chromo-lithographic art. Each picture gives a more faithful and exact idea of the rare conditions it is intended to portray than could be conveyed in a hundred pages of text.

The only criticism we would pass upon the plan of the work is that it is printed in German, French, and English. This will add materially to the bulkiness of the completed work, besides being quite unnecessary, as it conveys an imputation upon the specialist, for whom the work is intended, to assume that he is not familiar with each of these languages. The work can be obtained in this country only from the publishing house of the J. B. Lippincott Company, who are the sole American agents.

Illustrations of Diseases of the Skin and Syphilis, with Remarks. By TOM ROBINSON, M. D. London: J. & A. Churchill, 11 New Burlington. 1890.

THE appearance of another atlas of diseases of the skin and syphilis in a country whose dermatological literature is already enriched by the works of Wilson, Tilbury Fox, Hutchinson, and the magnificent collection of chromo-lithographs issued by the Sydenham Society, might seem superfluous. The author, however, very properly insists that illustrations of the various aspects of diseases of the skin and the manifestations of syphilis are far from complete, and he finds, moreover, in the ease and precision with which knowledge is conveyed by means of plates, a sufficient reason for his proposed production of a series of colored and plain illustrations of special types of these diseases. His intention is to produce two fasciculi each year, with at least three full-page illustrations and letter-press, the work extending over several years.

In the first fasciculus, which is before us, Plate I pictures very faithfully the cachexia and characteristic eruptive features of a somewhat aggravated case of inherited syphilis. The second plate depicts syphilis of the palm and eczema of the palm. The figures are well drawn but rather too

highly colored with an excess of the purplish tint so characteristic of Burgess's work. The third plate is an admirable illustration of kerion, or suppurating ringworm of the scalp.

The text consists of remarks upon the nature and clinical features of the diseases illustrated, with extended suggestions and notes of treatment.

Traité descriptif des maladies de la peau. Symptomatologie et anatomie pathologique. Par MM. HENRI LELOIR, Professeur à la Faculté de médecine de Lille, et EMILE VIDAL, Médecin de l'Hôpital Saint-Louis. 2me livraison. Paris: G. Masson, Editeur, Libraire de l'Académie de médecine. 1890.

WE have already called the attention of our readers to the design and scope of this work, in which the study and illustration of the pathological anatomy of the various diseases of the skin form such a prominent and valuable feature.

The subject-matter of the second number before us is embraced under the following titles: Bouton de biskra; Canities; Charbon bacteridien, Cheloid, Colloid Miliun; Clavus, Cutaneous Horns, Cysticerque, Dermatitis Exfoliantes.

The symptoms and clinical course of these affections are exhaustively treated, while the pathological anatomy of the lesions is described with great minuteness and detail. The illustrations comprise six admirably executed chromo-lithographic plates with twenty-three figures, which are marvels of delicate drawing and artistic coloring, and represent the pathological anatomy of the lesions of cheloid, clavus, cornu cutaneum, true exfoliative dermatitis, chronic malignant exfoliative dermatitis, ecthyma, acute vesicular eczema, subacute and chronic eczema, local and generalized, and eczema seborrhoicum.

The Medical Annual and Practitioners' Index, a Work of Reference for Medical Practitioners. Edited by P. W. WILLIAMS, M. D., assisted by a Corps of Thirty-six Collaborators. 600 Octavo Pages. Illustrated. 1890, Eighth Year. E. B. Treat, Publisher, 5 Cooper Union, New York.

THE aim and scope of this popular publication are too well known to the profession of this country to require extended comment.

The eighth volume embraces in its editorial corps both European and American contributors distinguished as specialists in their several departments, and the work fully sustains the high reputation this annual has secured as an exponent of the latest advances made in therapeutics.

In addition to the Dictionary of New Treatment in Medicine and Surgery, which composes the bulk of the work, the present volume is enriched by valuable papers upon Baths and their Therapeutic Uses, Electro-therapeutics, and a chapter on Sanitary Science. The section devoted to Medical Examinations and Life Insurance is an additional feature of interest.

Treatment of Pruritus Cutaneus Universalis.—Wertheimer (Münch. med. Wochenschr., 44, 1889) recommends natrium salicylicum in doses of about 3 grammes daily in the treatment of pruritus cut. univers. He had in three cases not only speedy relief, but effected with this remedy a complete cure.—*Fortschritte der Med.*, 12, 1890.

Items.

Hereditary Syphilis transmitted Fourteen Years after Infection.—Barthélemy recently showed a child four months of age before the *Réunion clin. hebdom. l'hôpital St. Louis* with a disseminated pustulo-crustaceous syphilide. The child was well nourished and was born of parents eighteen years married, both of whom had passed through the various stages of syphilis without treatment fourteen years before. Of five children older than this one, the first, born three years after the infection of the parents, died at the age of seven years. The second child also died at the age of seven years, of some exanthematous disease; the third, at the age of nine months, of cholera infantum; the fourth, one month old, of broncho-pneumonia. The fifth child is now three years old, imperfectly developed, and has interstitial keratitis. Fournier could show the possibility of the transmission of syphilis as late as the twentieth year after infection.—*Annal. de dermat. et de syphiligraphie*, 1889.

The Treatment of Gonorrhœa by Salol.—J. Ernest Lane (London Lancet, March 22, 1890) gives the results of the treatment of fifty cases of gonorrhœa in which salol was employed in doses of from five to thirty grains three times a day. Six of the cases were cured, twenty-four showed considerable improvement, in fifteen no change, either for the better or worse, was seen, while in five cases the symptoms were aggravated. The beneficial effects of salol manifest themselves in a very short time. When improvement takes place the symptoms show an abatement in from two to five days; in acute cases the painful micturition is early alleviated; in cases of a more chronic nature the discharge is materially lessened in this time. The effect of the drug does not appear to be enhanced by larger doses than twenty grains; when the amount was increased to thirty grains the urine became blackened and the symptoms did not show any proportionate improvement.

A Case of Multiple Dermatomyomata of the Nose.—Several myomata of the size of a hemp-seed had developed in the skin of the nose of a nineteen-year-old girl. They were first noticed as warts at the third or fourth year of the patient's life. They were connected with the muscularis of the blood-vessels. The vessels in the neighborhood showed diffuse or circumscribed hyperplasia. From such places the myomata had originated. They were not vascular, contained only a few nerves, and had never caused any pain. They could be easily removed after severing the layer of skin which covered them.—Dr. K. Hesse, *Virchow's Archiv*, cxx, S. 321.

Does the Fatty Secretion of the Human Skin contain Lanoline?—Dr. Aug. Santi (Monatshfte f. prakt. Derm., Bd. ix, No. 4) investigated in Unna's laboratory the statement of Liebreich that lanoline occurs in the keratine-containing tissues, especially in the human epidermis, in the hair, the vernix caseosa, etc. Santi found that neither the epidermis, the derma, nor the subcutaneous fatty tissue contains any trace of lanoline. He also says that all in Liebreich's statements regarding lanoline concerns exclusively cholesterine.—*Fortschr. der Med.*, 13, 1890.

Aristol Ointment.—The following formula is recommended by Eichhoff:

R. Aristol.....	3 to 10 parts;
Vaseline.....	30 parts.

M. Ft. ungt.

The ointment is said to be not less efficacious than chrysarobin in psoriasis, and to have the advantage over the latter that it does not stain the skin or irritate. It is well after applying the ointment to cover the part with protective or rubber.—*British Journal of Dermatology*, June, 1890.

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NOTES ON PILOCARPINE IN DERMATOLOGY.*

By Dr. HERMANN G. KLÖTZ.

ABOUT 1813 the leaves of jaborandi were introduced into therapeutics, and soon afterward, in 1816, it was demonstrated that their powerful effects, shared by no other known drug, could be produced in a much more precise and convenient manner by means of their most important constituent, the alkaloid pilocarpine and its salts. When we consider that the most conspicuous action effected by this drug, almost with the certainty of a physiological experiment, is the increase of perspiration and a profuse secretion of sweat, probably the most important function of the skin, we might well expect to find that in the first line those engaged in the study of the skin and its diseases would have directed their attention to the new remedy. Yet in 1819 the late G. Simon, professor in Breslau, in a paper to be referred to later, wrote that he had not heard anything about the application of pilocarpine in the treatment of skin diseases. While it is not strictly true that no publications on this subject had previous to that time appeared, a careful search, principally in the *Jahresberichte*, by Virchow and Hirsch, of the literature on jaborandi and pilocarpine, which by that time had become already quite voluminous, reveals but a very insignificant percentage from the pen of dermatologists. In 1815 Robin reports negative results from the use of pilocarpine in eczema; in 1816 Purjéss the same in psoriasis; in 1817 Dave records a cure of erysipelas of the face within four days by an infusion of jaborandi; and Keating, favorable results in night-sweats of phthisical patients. The effects of the derivatives of jaborandi on syphilis have been studied somewhat more extensively, culminating in the elab-

* Read at the fourteenth annual meeting of the American Dermatological Association at Richfield Springs.

orate paper by Lewin, On the Effects of Pilocarpine in General, and particularly on the Syphilitic Process, published in 1880 in the *Charité-Annalen* for 1878. It is, however, not my intention to consider syphilis within the scope of this paper. In 1879 Schmitz reported favorable results from injections of pilocarpine in alopecia arcata, which he had obtained incidentally and which were confirmed by M. Schuller by experiments made on rabbits; and in the same year there appeared G. Simon's paper (*Berl. klin. Woch.*, No. 49), On Prurigo and its Treatment with Pilocarpine, and in 1880 (*Vierteljahrsschrift für Dermatologie*) Pick's, On the Therapeutical Use of Pilocarpine in Diseases of the Skin—undoubtedly the two most important publications on the subject.

In 1881 Armaingand successfully used pilocarpine in hyperidrosis pedum, and Martini confirmed its effectiveness in the treatment of prurigo, reported by Simon and Pick. In 1884 Piffard (*Monatsh. f. prakt. Dermatologie*) mentions Ringer's recommendation of pilocarpine against hyperidrosis, and speaks of his own favorable experience in certain forms of pruritus, dermatitis chronica exfoliativa, and in a severe case of ichthyosis. S. West (*St. Bartholomew's Reports*, vol. xx) in 1885 reports successful results from the use of pilocarpine in the night-sweats of phthisis, in myxœdema, where they have been confirmed by Ord and other British authors, and a failure in a case of scleroderma. In 1889 Stephen Mackenzie (*Monatshefte*, ix, 170) speaks of the great value of pilocarpine injections in one case of dermatitis exfoliativa universalis. I am well aware that this enumeration by no means includes all the observations that have been published. Probably a good many rest obscurely in papers with other titles, where it is next to impossible to trace them. Altogether, however, the scarcity of publications tends to prove that pilocarpine has not found much favor with dermatologists, and while it is mentioned in some of the more recent hand-books on skin diseases—for instance, in those of Ziemssen and Kaposi—it is absolutely ignored by others, as Duhring, Crocker, etc. Only in one field does it seem to have attained a more popular, perhaps really not so well deserved, consideration—that is, in alopecia arcata. Had all the reports on the value of pilocarpine been unfavorable, there would be no reason for surprise at its being neglected and almost forgotten; but this is by no means the case. Some of the good results obtained by several authors have been mentioned already. Simon speaks very highly of the good effects of the pilocarpine treatment of prurigo, which he failed to observe in eczema and other skin diseases. Pick, however, whom, I believe, you all know as a conscientious and careful observer, and who probably has employed pilocarpine and jaborandi more extensively and more methodically than anybody else, in hospital as well as in outdoor practice, was very well satisfied with the results obtained in prurigo, pruritus, chronic urticaria, alopecia pityroides, and in

certain conditions of eczema, while in alopecia areata the effects were, to say the least, doubtful, and entirely negative only in psoriasis. It is true, the number of diseases which were benefited is a rather limited one, and in none of the diseases which were heretofore judged to be incurable, like prurigo, has a permanent cure been effected, although both Pick and Simon agree that the character of the disease became milder and the intervals between relapses longer than after other treatment. But some of the diseases in which pilocarpine proved efficacious—like prurigo, chronic urticaria, dermatitis exfoliativa, pruritus, etc.—belong to a class which ordinarily resist most obstinately the efforts of therapeutics, and in which the addition of every effective remedy must be particularly welcome.

There must, therefore, be other causes why pilocarpine has failed to become attractive to the dermatologists. I suspect that many may have begun, full of enthusiasm, to experiment with it, but met with disappointment, and, giving up further trials, became disgusted and failed to publish their experience. Further, it can not be denied that the incidental effects of the drug are by no means agreeable, principally the excessive salivation, nausea, great susceptibility to the influence of cold, and considerable weakness, which may run into actual collapse. All these drawbacks, however, have been met with, at least in a more distinct and dangerous manner, only after large doses, as after injection of a third of a grain (2 centigrammes) of pilocarpine, the dose most frequently mentioned. Pick, however—who usually gave more reduced, although more frequent, doses, mostly *per os* ($\frac{1}{4}$ grain = 1 centigramme)—states that “the general health of the patients was not disturbed even after the use of pilocarpine was continued for months; the records rather confirm, with unanimity, that the appetite increased and nutrition improved. This occurred even in the few cases where the remedy, almost after every application, produced a transitory nausea.” It appears, therefore, that such complications could be avoided by the use of smaller quantities of the drug, and should, therefore, not be considered as important obstacles. I am rather inclined to seek the cause of the disinclination to the use of pilocarpine in the teachings of physiology, which do not tend either to encourage further experiments or to sufficiently explain their results. For more than forty years it has been the general opinion that the elimination of water from the skin in gaseous as well as in fluid form, which before had been considered a physical evaporation of transuding blood, was really a secretion, brought forth from the sweat-glands under the stimulus of certain nerves. These glands are situated in the deepest portion of the cutis or in the subcutaneous connective tissue, and derive their blood-supply from the lower one of the two horizontal plexuses of blood-vessels. Their ducts, which pass through the cutis and the epidermis without having anything to do with the most

important portions of the skin, deposit the product of the gland on the cutaneous surface, where it may produce the same softening and macerating influence on the skin which we notice after a warm bath or after wrapping up of patients in blankets and other diaphoretic resources. It is interesting to notice that both Pick and Simon have raised the question whether the effects of pilocarpine in prurigo are the same as those produced by a sweat-bath—*i. e.*, whether the certain quantity of sweat deposited on the surface by the glands of the healthy skin is really the only active principle of the treatment on the diseased portions. “I had to reflect,” says Pick, “whether the positive results have not to be attributed exclusively to the protracted, intense perspiration of the patient and to the incidental softening and maceration of the diseased skin, like in a bath; in short, whether or not pilocarpine acts like all diaphoretic remedies, which we know to play only the part of lukewarm baths, without even equaling their effect.” Pick therefore treated a number of cases under such precautions that a profuse secretion could not take place, and that the increased perspiration lasted only a short time, so that it was impossible to speak of a macerating influence of the sweat on the pruriginous portions of the skin, but with the same results. The improvement in the diseased skin must necessarily, therefore, be attributed to the direct influence of the pilocarpine on the skin itself.

Simon says: “Skeptical people, not without good reason, will ask whether the treatment with pilocarpine is not really identical with the simple wrapping up in wet blankets, or with the dispensation of diaphoretic infusions. We are well aware that such treatment may favorably influence prurigo, even without any remedies. But counter-experiments have convinced us that the involution of the disease takes place much more rapidly and much more intensely during the use of pilocarpine than what I may call the simple treatment of prurigo. It is true, however, that it would be impossible to give another theory of the effects of pilocarpine, except the removal of the obstruction to the secretion of sweat mentioned above. But this is a want which this method has in common with a good many other therapeutics.”

Truly, no other theory or explanation could be admitted under the generally ruling teachings of physiology. But, as you are all well aware, Unna—in a paper read before the seventh International Congress, held in London in 1881 (published in the *British Medical Journal*, October 1, 1881, and in Schmidt's *Jahrbüchern*, 1882, vol. 194), and since then in other publications—has assailed the correctness of the ruling theory on the strength of old and new facts, and has insisted on dividing the functions of the secretion of sweat among different organs. Without following him in every detail of his arguments, Unna maintains that not every fluid that appears on the surface through the sweat pores must necessarily be the

product of the sweat glands, or, as he wants them denominated, of the coil glands. The real function of these glands is to keep the skin sufficiently oiled, and to produce the adipose tissue of the *paniculus adiposus*. The watery element, however, of the sweat, particularly the copious perspiration after the sweat-bath or after pilocarpine, as it exudes from the sweat pores, and which, under ordinary conditions, is of alkaline reaction, is of different origin. It is drawn, in part, from the intercellular juice, which circulates beneath the impermeable corneous layer of the epidermis in the inter-epithelial spaces of the rete Malpighii, and has free communication with the sweat duct, which here is without any membrane, and probably in part from the blood-vessels, which, originating from the superficial plexus, surround the duct with a dense net-work of capillaries on its passage through the cutis. Such sweats would be combined with a superficial hyperemia of the cutis; they would be favored by the relaxing influence of heat; the action of the sympathetic nerve fibers would take the background, while that of the vaso-dilator, vaso-motor nerves would come to the front, both secretory and vaso-motor nerves following the same nerve trunks.

Unna's views have met with a good deal of opposition; some authors, however, have had to acknowledge at least the importance of the facts which he has brought forward, as well as the force of his clever deductions, while others, again, have accepted his views, among them Duhring, who says that Unna's explanation appears the most plausible one. If, then, we may accept Unna's views as correct, it is evident that by the administration of pilocarpine we will produce important changes in the tissues of the skin itself; an increased influx of the greasy secretion of the coil glands into and on the upper strata of the epidermis, and a more thorough oiling of the corneous layers on the one hand; on the other, dilatation of blood-vessels of the papillary plexus, abundant supply of blood to the capillaries, increased transudation into the intercellular spaces, and a more lively circulation of the intercellular juice toward the ducts and through the pores to the surface. We then may reasonably expect by such powerful actions to effect important changes in the anatomical condition of the skin, in its healthy state as well as in a state of disease, resulting favorably or unfavorably according to the character of the pathological process present. It is easily understood why in certain diseases—for instance, in pemphigus and in the acute stages of eczema—the patients get worse after pilocarpine. But where we have to do with chronic infiltration, with a thickened corion, with a very dry, horny epidermis, where the functions of the coil glands have been restricted or ceased altogether, like in prurigo, in chronic eczema, perhaps in the dry skin of senile age, in pachydermatous and xerodermatous conditions, as Pick says, here absorption of infiltration, softening of tissue, elimination of organic and inorganic noxes, may

justly be looked for. Indeed, Pick has mentioned distinctly on several occasions that, after the continued application of pilocarpine, he found the skin more delicate, softer, and smoother, that the hair appeared less brittle, and the dry scales on the scalp decreased or disappeared altogether. This observation must gain in importance in the face of the pre-eminence which, owing to Unna's investigations, the seborrheic process has recently assumed. Pick also reports that during the pilocarpine treatment in pruriginous patients, on the affected portions of the skin no sweat appeared at first, but it would gradually begin to show, like on the healthy skin, in milder cases after two, in more severe ones after four to six weeks.

Such results, however, must not be expected to follow rapidly from the momentary violent action as produced by large doses of pilocarpine, but rather by the continued and often-repeated influence of smaller doses. This has been also practically demonstrated by Pick, who, as a rule, employed much smaller quantities of the drug than others, and I firmly believe it is due to his method that he alone, contrary to the experience of all other authors, saw satisfactory results in chronic *eczema*. I should have been very glad to suggest an explanation for the influence of pilocarpine on the itching in *pruritus* as well as in *prurigo* and other diseases, but, owing to the want of a satisfactory explanation of the nature of this symptom itself, we must look for it to the future.

After having occupied so much of your time by theoretical reflections and argumentations, you might justly expect that I should bring forth a large amount of clinical material in confirmation of what I have said; in this expectation I am very sorry I have to disappoint you. I have put the theory to a practical test in a small number of cases which, however, have given results satisfactory enough to encourage further trials and to furnish an excuse for calling your attention again to the value of pilocarpine.

I shall mention but briefly two cases of *pruritus senilis* in which a solution of pilocarpine, fifteen centigrammes in ninety grammes of water, was prescribed, a teaspoonful to be taken three times a day, and in which the itching became gradually less and disappeared entirely under reduced doses within four weeks; in two other similar cases such a result was not obtained, and the drug seemed to have no effect at all on the itching. But three cases of *eczema* which were under my observation during my late service in the German Hospital, where I was able to watch the effects more accurately, deserve a more minute consideration. The muriate of pilocarpine was administered by daily hypodermatic injections of ten to fifteen drops of a one-per-cent solution, making the dose from six milligrammes to one centigramme—about one ninth to one sixth of a grain—which never failed to produce a moist skin or mild perspiration; except slight nausea occasionally and a certain weakness, lasting not more than

one or two hours, no evil consequences followed. Whenever profuse perspiration or salivation took place, the dose was reduced.

The first patient was a book-keeper, twenty-eight years of age, rather anæmic and poorly nourished, who had been suffering from eczema for several years, and presented all the features of a universal squamous eczema. The skin showed no great infiltration on any portion of the body, but was dry, hard, and resistant, slightly scaling. External treatment with ungt. diachyl., tar, and salicylic acid, combined with tonics, which his general condition urgently required, had very little effect. I resolved to try pilocarpine. After the first injections the reaction was very slight, only a moderate moisture appearing on some of the less affected portions, but it gradually became more distinct, and after about twelve injections a general secretion of sweat was produced. After seventeen injections, when the patient left the hospital because he was afraid to lose his position, the scales had almost entirely disappeared, the skin was much softer and pliable and showed a much more natural turgor and elasticity; itching had become very insignificant, while the appearance and the general health of the patient were greatly improved. Unfortunately, I have not seen the patient since, so that I can not say how long the effect of the treatment lasted.

The second patient, a bar-tender, twenty-one years of age, had been admitted to the hospital in January with eczema squamum and rimosum of both palms, and a general erythematous eczema which had disappeared when I took charge of the service. Both palms were covered with a very hard and thick horny skin divided by numerous deep cracks. The eczema had commenced about two years ago after burning with lye of potash, and had been aggravated, undoubtedly, by the frequent working in water. He was then treated with local tar baths, tar ointment, and salicylated plaster, and left the hospital, February 18th, greatly improved but not cured. Treatment was continued in the German Dispensary, but, as he had returned to his former occupation, the thickening and cracking of the skin on the palms was soon as bad as ever, and he was again admitted to the hospital on April 23d. He was then unable to bend or close his fingers, and every movement of the fingers was rendered extremely painful by the fissures. As very slow progress was made by treatment with local baths of a weak solution of caustic potash and application of tar and salicylic acid, beginning May 10th, daily injections of pilocarpine were given. At first the hands and the lower half of both forearms remained perfectly dry, while the rest of the body showed sufficient reaction. On May 18th the perspiration extended to the wrists, on May 20th to the back of the hands, and on May 25th to the whole hand with the exception of both palms. On June 2d, after nineteen injections, for the first time sweat appeared over the entire hand, including the palm. At the end of my service, June 1st, the horny condition of the surface of the palms had entirely disappeared, the skin looked natural, showed all the ridges and indentations of the surface, was soft and pliable, and the patient could move and close the fingers without any pain or difficulty. He left the hospital on June 6th, and has since been attending the dispensary again. He changed his occupation, but, unfortunately, to that of driving a baker's wagon, which,

owing to constant handling of the reins, does not seem to be very congenial to the hands, so that the palmar surface of the fingers has become hard and cracked again, while on the palms the skin has remained in a fair condition.

The third patient, a cap-maker by trade, twenty-seven years of age, was sent to the hospital on May 23d from the dispensary, where he presented himself with a general papular eczema, much aggravated and attended with considerable thickening on the flexor aspects of both elbows. Over the entire chest and abdomen, and in a milder degree on the extremities, the skin was hard, dry, slightly scaling, of a dark-brown color, with numerous small, hard papules of a somewhat lighter color, suggesting certain features of the so-called pityriasis rubra pilaris. The patient did not date back the affection of the skin more than two months; it seems probable, however, that his skin had always been dry and dark, representing one of the mildest forms of ichthyosis, as described by Kaposi. Bathing and washing with soft soap and application of ungt. diachyl., etc., had not much effect on the general condition of the skin, so from May 28th he was put under pilocarpine treatment. After eight injections, when he left the hospital, the skin had lost a great deal of its former dryness and hardness, the papules had been considerably reduced in size, and itching had almost disappeared. Unfortunately, the patient had to leave the hospital, and, owing to his somewhat spasmodic attendance at the dispensary, I have not felt tempted to continue the treatment outside. The skin, in spite of several relapses of the local eczema of the arms, has retained the degree of pliability and softness which it had attained during his stay in the hospital.

In conclusion, I take leave to make the following suggestion:

In the light of more recent theories of the physiology of the secretion of sweat, the use of pilocarpine in pachydermatous and xerodermatous conditions of the skin is strongly indicated and deserves to be subjected to renewed trials, but in small doses and long continued, as recommended already by Pick.

42 EAST TWENTY-SECOND STREET.

ELECTROLYSIS IN THE TREATMENT OF LUPUS VULGARIS.*

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JUDGING by the scanty mention made in the text-books upon dermatology of the treatment of lupus by electrolysis, the inference is forced upon us that its value is not appreciated as a reliable means of cure for this obstinate disease. Looking over the most recent books upon my

* Read at the fourteenth annual meeting of the American Dermatological Association at Richfield Springs.

shelves, I find no mention of this method of treatment by Anderson, Shoemaker, Jamieson, Van Harlingen, or Stelwagon. Both Crocker and Hyde quote Gärtner and Lustgarten, but give no opinion of their own. Even Hardaway, that great apostle of electrolysis, dismisses the matter in the few words: "Electrolysis also answers very well."

In 1886, Gärtner and Lustgarten contributed a paper to the *Wiener medicinische Wochenschrift*, upon the subject of "The Treatment of Lupus by Electrolysis with the Flat Electrode," which brought the matter prominently before the profession. They reported ten cases successfully treated by this method, and described their mode of working as follows: Their electrode was made of silver, slightly curved and set in a ring of hard rubber, which projects to a short distance beyond the plate. The object of the ring was to protect the healthy skin from the action of the current. The part to be operated on was first washed with soap and water. The plate was then applied to the part, and a current of eight to ten milliamperes was allowed to pass for about ten minutes. After the operation the part was dressed with iodoform. They said that the operation was painless.

During the past four years I have been trying this method in every case that came under my hands. Happily, in this country lupus is a rare disease, and I have been able to try the method in but six cases. The results of my experience I give now, not because they are as conclusive as could be desired, but because they are so good as to warrant me in calling your attention to them, in the hope of encouraging you to try the method for yourselves. Perhaps some of you have had more experience than I have with the method, and will give your testimony for or against it. If so, this short paper will not have been written in vain.

I have sought to throw out any question of the favoring action of anything but electrolysis by using that alone. Therefore I have employed no dressing to the part worked on, especially avoiding iodoform, as its antiseptic action might be thought to vitiate the correctness of the inferences drawn. I have had no reason to regret this, as no untoward results have occurred. I have further modified the method of Gärtner and Lustgarten by employing the needle electrode as well as the flat electrode, as will appear further on.

The electrode I have used is made of zinc, set in a hard-rubber button, the hard rubber projecting for a millimetre beyond the metal. The diameter of the plate is half an inch. This electrode is made to fit on to an ordinary sponge electrode handle. The needle I have used has been an ordinary, rather coarse sewing needle. It is needless to say that the current used is that called constant, from a galvanic battery; and that the metallic electrode is attached to the negative pole. The sponge electrode is placed indifferently on the body, and the current is completed when the

metallic electrode is in place. The current strength employed was about seven milliamperes, and it was allowed to pass for about seven minutes. The electrolytic action of the current seems to expend itself upon the diseased tissue alone, passing along the ways of least resistance. The sound skin in a patch and the cicatricial tissue is affected little, if at all. When the plate is removed from the skin the tissues look blanched for a moment, but very soon it will be noticed that there is a little swelling over the sites of the tubercles, and then a drop of moisture will gather over these points. Upon the operated patch a crust will form which will fall in a week or so. It is astonishing how rapidly the raised patch will flatten out under the use of the flat electrode. When the place has been gone over a few times in this manner, it will be seen that a great deal of the thickening of the patch has disappeared, and that there remain only a few of the brownish lupus tubercles scattered about in the patch. Now, I prefer to resort to the needle and destroy each tubercle separately, using for this a current strength of about three milliamperes. Without doubt the flat electrode would be fully as effectual.

My experience has shown that the operation is not painless, the patients complaining of a burning sensation both in the part operated on and in the hand that holds the sponge. Still, the pain is not very great, and, unless in a highly sensitive subject, it is quite easily borne.

The most important question in regard to the whole subject is that which asks the results obtained. It has happened that all my cases have been of the non-ulcerative variety. In one case the disease had lasted fifty years, and had been subjected to many different plans of treatment without cure. It had spread around the face from the left ear to the angle of the jaw on the right side, involving the left ear, nearly the whole of the left cheek, and a broad strip under the chin. One case had lasted thirty years, was on the left cheek, and formed an irregularly shaped patch, whose longest diameter was about three inches. Two cases had lasted seventeen years; one case, two years; and one, one year. All these cases showed marked improvement; one was entirely cured, one was nearly well when the patient was compelled to leave the city, one was lost sight of, and three I have still under observation. One of these latter cases comes very irregularly, but it is entirely well with the exception of one or two small spots. The particularly bad case detailed has been coming to me regularly twice a week for over a year, and the progress of the disease has been checked and most of the tubercles destroyed.

The scar left by the operation is smooth and pinkish white and perfectly supple. The skin heals up very kindly after each operation, and the sittings can be repeated once a week. The part worked on is a little sore for a day or two, and that is all.

This method of treatment is slower than some others, and that is the

only objection I can find against it. Perhaps if I had used higher currents, longer continued, better time would have been made.

The advantages that this method of treatment offers, as compared with other and older ones, are as follows:

1. It is comparatively painless, and there is no need of putting the patient under an anæsthetic.

2. There is not the slightest loss of blood, and thus there is no dread of a surgical operation on the part of the patient.

3. The patient is not kept a moment from his regular business, as there is no deformity caused by the operation. The part looks no worse after the operation than before. As no after-treatment is required, he is not obliged to go about with a patch of more or less unsightly plaster on his face. He is also spared the discomfort of a swollen face and eyes, the ordinary attendant on the arsenical or pyrogallie-acid treatment.

4. The treatment goes to the root of the disease, to the bottom of the tubercle, with far more exactness and less damage to the surrounding skin than any other caustic or surgical method.

5. The scar left is smooth and not unsightly.

6. The result obtained is as good if not better than that by any previous method.

Sufficient time has not elapsed for me to speak as to the possibility of the recurrence of the disease in the scar. At this time I would only incite you by this paper to try the method for yourselves, feeling sure that if you do so you will have good cause to be pleased with it.

DISEASES OF THE NAILS.

By JOHN V. SHOEMAKER, A. M., M. D.,
Philadelphia, Pa.

(Continued from page 393.)

WHEN we turn from the consideration of those affections of the nails which are dependent upon constitutional causes to those which are of local origin, we find that the latter may be divided into three classes: (1) those which are the direct result of traumatism; (2) those in which some cutaneous disorder locates itself beneath the nail; (3) those in which the nail and its bed are attacked by parasites.

A contusion, wound, pressure, the sting of an insect, thermic or chemical influence may lead to inflammation of the bed of the nail with partial or total separation of the nail plate. The nail is more or less perfectly reproduced unless the matrix be too severely injured, in which case there is either no attempt at reproduction or the nail is deformed.

In onychia, or onyxitis, the bed becomes swollen and painful. The

surrounding skin also participates in the inflammatory congestion. Suppuration takes place beneath the nail and an ulcer forms around its root. The granulations are generally exuberant and overlie the upper surface of the edge of the nail. The suppuration is fetid. If the inflammation be limited to the borders of the nail it is termed perionychia. The nail becomes discolored, yellowish, yellowish-brown, or brownish-black. It may loosen and fall.

Ingrown or inverted toe nail is the name given to a common condition in which one or both lateral edges of the nail become imbedded in the adjacent soft tissues, giving rise to a perionychia with the symptoms as described in the preceding paragraph. It is produced by lateral hypertrophy of the nail, which becomes an irritant foreign body. M. Reclus * observes that as M. Vernenil has shown that diabetes predisposes to ingrown nail, so lymphatism may assist its development. He mentions the case of a girl, twelve years and a half of age, previously healthy, who had had a severe attack of typhoid fever, followed by two relapses. During convalescence, and while scarcely able to walk in her room, an ingrown nail developed.

The lateral pressure upon the toe of ill-fitting shoes is usually a co-operative cause.

Innumerable methods of palliative treatment have been devised for ingrown nail. One of the best, according to my experience, consists in cauterization of the affected part with a crayon of nitrate of silver or with pure carbolic acid. This is preferable to removing all or part of the nail, as it preserves the nail and is less painful. After cauterization, a small piece of absorbent cotton may be worked in between the nail and the skin fold; the offending portion of nail can thus be gradually elevated and subsequently may be cut off without pain. If, for whatsoever reason, a more radical treatment is demanded, the adjacent skin and cellular tissue, together with the granulations, may be removed by a sloping incision after the manner of Dupuytren, or a section may be removed from the edge of the nail itself by means either of a bistoury or the seissors. The entire root should be extracted and the matrix scraped, in order to limit reproduction.

The mechanical or chemical effects incident to the pursuit of certain occupations are frequently injurious to the nails. Thus, in dyers and tanners they are apt to become thickened, fissured, rough, and painful. Bartenders, also, are subject to similar alterations from the constant wetting with water and beer to which their fingers are exposed.

A form of onychia to which confectioners are liable has, during the last nine years, been studied by Dr. Poncet, of Lyons. Confectioners are

* De l'onyxis et son traitement. Par M. Reclus. Gazette des hôpit aux, 1889, lx, 958.

often obliged to have their hands in saccharine solutions. After a time, certain of them suffer from inflammatory lesions of the matrix of the nail.* These begin upon the sides, after which they invade all the periungual tissues. Redness, slight swelling, and moderate pain accompany the beginning. At the same time the nail becomes detached at the side, grayish-black in color, and loses its elasticity and solidity. If the man discontinues handling the syrup, resolution occurs; if not, little indolent abscesses form, and the nail becomes more and more altered. It does not fall *en masse*, but becomes dry and brittle and falls in the form of little chips. The new nail is irregular and larger than normal. The disease may attack any finger, but prefers the ring and middle fingers of the right hand. A cure depends upon cessation of work. The trouble may recur and lead to extreme deformity. The neighboring skin becomes reddened, thickened, hardened, and the nail laterally undermined. But a certain tolerance seems to establish itself, and after a while the workmen do not suffer much if they do not keep their hands in the sugar long and wash and dry them carefully afterward. This disease particularly attacks the makers of candied fruits. The etiology is complex. Sugar, acids, and heat co-operate. The warm solutions of sugar are sometimes acid and sometimes alkaline in reaction. A periungual dermatitis is occasioned, which affects the nutrition of the nail. It may not be confounded with any other variety of onychitis, by reason of its seat, multiplicity, slow progress, and professional origin.

The treatment is prophylactic. Spoons or long-handled skimmers should be used instead of hands for dipping into the sugar solutions. If this precaution is not taken, the hands should at least be carefully washed and the sugar brushed from beneath the nails. When the disease is established the patient should cease work and antiseptic remedies should be applied.

HYPERTROPHY OF THE NAIL.—This is by no means an uncommon affection. The nail may be increased in length or in thickness or in all dimensions; or it may be thickened only in certain parts of its extent. Its upper surface may project in the form of a cone or wedge; its lateral borders may, as has been described, excite severe inflammation in the surrounding soft tissues; it may be prolonged anteriorly into the most fantastic deformity. Frequently, after attaining a certain length, it becomes curved so as to resemble a claw or talon. Hypertrophy is otherwise known as onychanxis, while the talon-shaped deformity is designated as onychogryphosis. The name onychanxis is likewise used to signify other abnormalities of nail formation which sometimes occur, as, for instance, the growth of a double nail upon the same finger or toe, or in

* Une variété d'onyxis propre aux confiseurs. Par le Dr. Poncet, de Lyon. Bulletin de l'Académie de médecine, iii ses., xxi, p. 330.

unusual situations, as upon an amputated stump or, as sometimes happens, upon the shoulder over the scapula. The upper surface of a hypertrophied nail is variously altered. It loses its luster, becomes opaque, uneven, yellowish, yellowish-brown, or black in color. It sometimes becomes very dense and hard, though at other times it is softened. Again, it may become brittle in texture. Its under surface may be covered with epidermic scales. Hypertrophy may affect the nails of the fingers or of the toes, but is more common upon the latter. It may be limited to one or two; in other cases, many or all are involved. In addition to the deformity which it creates, hypertrophy is a serious affection in that it impairs tactile sensibility. The fingers are therefore incapacitated for the performance of fine work. If developed to a considerable degree upon the toes, it renders progression difficult or painful. The trouble is essentially of chronic character, being dependent upon hypertrophy of the papillæ of the matrix and bed. Whatever cause, consequently, produces this papillary hypertrophy, leads secondarily to hypertrophic alteration of the nails. The commonest cause is entire and long-continued neglect, such as is seen in persons of untidy personal habits. Age constitutes a predisposition to hypertrophy of the nails, as it does to other forms of epithelial hyperplasia. Pressure, as from ill-fitting shoes, stockings, or gloves, is another frequent cause. Onychia, again, may be due to certain local or constitutional affections, as eczema, psoriasis, ichthyosis, lichen ruber, elephantiasis, leprosy, syphilis, scarlet fever, tuberculosis, or rheumatism. Nervous maladies likewise, as neuralgia, neuritis, chronic myelitis, etc., may lead to hypertrophy of the nails.

Excessive thickening or lengthening of the nail may be removed by knife, scissors, or saw. The free edge should be kept well pared and the margin of skin at its base and sides should be pressed back with some blunt instrument. The lead or tin oleate ointment should be applied to the base and sides. It is a good plan to gently work a small portion of absorbent cotton between the overgrown nail and the skin, thus gradually raising the former. If the free edge be brittle, it should be protected by wax, gum, or some other mechanical contrivance. If the local condition be dependent upon disease elsewhere, appropriate internal treatment must be combined with local measures.

A typical case of onychogryphosis has been reported by Dr. B. M. Ricketts, of Cincinnati:*

The patient, a German woman, thirty-two years of age, had been afflicted for a year. She had first observed a small spot of discoloration on the nail of the left index finger. The discoloration gradually extended, until it involved the entire nail. Others then became similarly affected. The

* Onychogryphosis. By B. M. Ricketts, M. D. Cincinnati Lancet Clinic, 1887, n. s., xviii, p. 302.

corium was very much hypertrophied and congested and somewhat sensitive to pressure. The nails were much thickened, narrowed, and talon-shaped. The upper surface was rough and irregular, and the under surface softened so that the blade of a penknife could be passed beneath the nail without giving rise to pain. Each of two nails formed one third part of a circle and were only attached to the corium posteriorly; they were very hard, dry, and brittle. The ends of the fingers were clubbed. It took about three months in each case for the entire nail to become involved. The general health was good and there was no evidence of syphilis or any cutaneous disease.

Hypertrophy of the nails is occasionally congenital. Such a case has been described by Mr. Sympson:*

A school-girl, aged eleven years, applied to Lincoln County Hospital on account of some slight ailment. A peculiar condition of her nails was noticed. The hands were normal in form and size. The nails projected upward and forward from their matrices to the distance of a half to three quarters of an inch, so as to present the appearance of claws. The mother stated that the nails grew rapidly and that when they were cut a quantity of clear fluid exuded and they became very sore. The feet were well formed, but the nails of the toes presented features similar to those of the fingers, excepting that they were shorter, about a quarter of an inch long. The child had been subject to skin eruptions ever since she was first vaccinated. There was no cleft palate; the teeth were normal and cut in good time. She was born at full term. The malformation of the nails was present at birth. The parents were healthy. There were five brothers and one sister, all healthy. There was no history of any case of the kind among the relatives. The knee jerk was slightly exaggerated on the left side, normal on the right. There was no ankle clonus or supinator reflex. Electrical reactions of muscle and skin were normal. Nothing was revealed by ophthalmoscopy except that the choroidal ring was very distinct.

ATROPHY.—Atrophy of the nail may be either congenital or acquired. When congenital, there is frequently associated an absence of hair and imperfect development of the phalanges. The acquired form is the result of depressed vitality of the matrix. This, in its turn, may be due to the operation of the same causes which, under other circumstances, lead to hypertrophy. A wound, contusion, pressure, syphilis, typhoid fever, tuberculosis, ichthyosis, or ataxia may occasion atrophy. Or, atrophy may succeed to hypertrophy. Severe inflammation of the matrix may likewise be followed by atrophy. Weir Mitchell has seen it in cerebral paralysis, and Gay as a result of compression of the subclavian artery.

The atrophied nail is smaller and thinner than normal, flexible, and easily broken. Its surface may remain smooth and unaltered, or it may become opaque, yellow, and fissured.

The cause, if it can be discovered, should dictate the internal treat-

* Congenital Deformity of the Nails (Onychogryphosis). By Mr. Sympson. *Lancet*, April 14, 1888.

ment. An ointment of zinc or lead oleate is useful locally, while wax or gum are protective.

Dr. Foxwell* has recorded the case of a girl, aged nineteen, in whom six finger and three toe nails had almost completely crumbled away, their remains feeling like bits of parchment beneath the cicatricial-like tissue which had grown over them from the superficial layer of the matrix. In two fingers this cicatricial tissue, peculiarly dense in structure, could alone be detected. Neither the girl nor her mother could give any definite date as to when the degeneration of the finger nails began, but both agreed it was before the patient went out to work, at the age of twelve. The toe nails had only been noticed for two years. There was no history of any injury or ulceration, nor, indeed, of any acute period of the disease. The condition had never attracted attention from pain nor from any annoyance it caused the girl in her work. To use her own words, "The nails would simply grow a bit and then break off again"; but this had always been a perfectly dry process. The patient was tall and well developed. She came complaining of general pains and feebleness, and her circulation was evidently sluggish. Indeed, so long as she could remember she had suffered from "dead hands and feet" in summer as well as winter. There were no signs of syphilis or struma in the girl or her mother, nor could any family history of these be obtained. Dr. Foxwell considered the case one in which the complex nail structure had been replaced by fibrous tissue, owing to defective blood-supply.

ECZEMA.—As eczema is such a prevalent cutaneous disorder, it is not surprising that it should in some instances attack the nails. We find, in fact, that in eczema, wherever seated, the nails are apt to exhibit various nutritive alterations, which are not, however, distinctive in appearance, and are not properly designated eczema of the nails. True eczema is usually an extension from eczema of the hands or fingers. Kaposi, Besnier, and Doyon have distinguished two forms of isolated eczema unguium: (1) perionycheal eczema, with subacute ungual lesions, separation, erosions, or deformity of the nail; (2) ungual eczema, properly so called, in which no redness is apparent, but the nutrition of the nails is profoundly affected, and scaly or fibrillar exfoliation occurs. An excellent description of a case of the latter kind has been given by Dr. E. de la Harpe.†

The patient was a man, sixty years of age, who had never suffered from eczema or any other cutaneous disorder. His nails had always been well formed. Two years previously he had noticed a slight redness and swelling upon the free edge of the nail-groove of the right ring finger. The nail became thickened, friable, and irregular. Other fingers of both hands were

* British Medical Journal, February 16, 1890.

† Note sur l'eczéma des ongles. Par le Dr. de la Harpe, Privat-docent de médecine de Genève. Revue médicale de la Suisse Romande, 1889, p. 78.

afterward attacked. The diseased nails were thickened and arched like the roof of a house. The surface was striated in the parts least affected; later, they became covered with little scales, which, when detached, left behind them little cavities, irregular as to size and depth. The nail was undermined at the sides by being gradually raised as it thickened, and by the primitive swelling of the bed of the nail. The most diseased nail was undermined in all its parts, broken and worn away upon its free border, of irregular form, and discoid. A deep groove traversed its entire breadth. The disease began in the following manner: Little rounded pits, four or five in number, were seen arranged in a straight line, one behind the other. They could only be seen in oblique light. Their diameter increased as they approached the free border of the nail. This was always the first manifestation. Longitudinal grooves were also present. There was a slight swelling of the free edge of the nail-groove. The fragility of the nail was manifest from an early period. There was no eczema elsewhere. There was nothing in the family history, except that the patient's father had had gout. He was cured by the baths of Louèche. The lesions are chronic, and disappear slowly.

The development of acute eczema of the nail has been also minutely observed by Dr. Deligny.* He had the opportunity, in two cases, to follow the daily changes in acute eczema of the nail. Both cases arose from extension of an intense acute attack of the back of the hands and fingers. When the eczematous lesions arrived at the nails, the matrix became swollen, red, œdematous, and painful. The inflammation extended to the groove of the nail. At the same time the nail became somewhat painful on pressure, and seemed as if raised from its bed. The elevation gradually became more apparent; the surface lost its convexity; it became marked with transverse grooves, which were rather deep and resembled fissures. The surface also lost its brilliant and polished appearance, becoming dull and opaque. There was pain at the end of the fingers, and a sense of constriction, as if they were surrounded by a rubber finger-stall. Intermittent pricking sensations also occurred. This condition continued as long as the acute attack of the hand and fingers. Then the swelling of the matrix and that of the groove diminished, and the hypertrophy of the nail decreased. At the same time, however, the nail assumed a blackish hue, due to infiltration between the ungual derm and the horny plate. The blackish color invaded all the nails, which remained rough, dull, and fissured. More than three months were required for a healthy nail to replace a diseased one.

In certain cases the eczema does not attack the nail proper, but stops at the surrounding fold of skin. This is called perionychal eczema, and is the most frequent variety. Eczema of the hand, limbs, or trunk may be slight, while that of the nails is severe.

(To be continued.)

* L'eczéma des ongles. Par le Docteur Deligny. *L'Union Médicale*, Dec. 6, 1887.

Society Transactions.

AMERICAN DERMATOLOGICAL ASSOCIATION.

THE fourteenth annual meeting was held at Richfield Springs, New York, September 2, 3, and 4, 1890. It was formally opened by the address of the president, DR. PRINCE A. MORROW, of New York, of which the following is an abstract:

After referring to the remarkable growth and development of American dermatology and the brilliant record of the scientific work done by this association, the address was devoted principally to a consideration of the position of dermatological instruction in this country.

Previous to 1876 there were but twelve medical schools in this country in which instruction was given in diseases of the skin. The entire teaching capacity was represented by three professors, two clinical professors, five lecturers, and two instructors. To-day this number has increased manifold, while in many of our colleges the quality of the instruction has been materially enhanced by the enlarged experience of the teacher and the improved clinical facilities at his command.

With the view of obtaining facts which should serve as a basis for an exact appreciation of the provisions made by the different medical schools in this country for instruction in dermatology, I recently addressed a circular letter to the executive officer of more than one hundred medical colleges in the United States requesting a copy of their announcement, also additional information respecting the hospital and dispensary facilities for the clinical teaching of skin and venereal diseases. As syphilis, though generally included in the official scheme of medical teaching under the head of venereal diseases, is one of the objects of study of this association, I have thought that it should properly be embraced within the scope of this inquiry. In the remarks which I may make upon dermatological instruction, it will be understood that dermato-syphilis is included.

From a numerical standpoint, the analysis shows that seventy-five medical schools in this country have no fewer than eighty-six officially recognized representatives of dermatology in their teaching faculties, ranked as follows: Forty-nine professors, eight clinical professors, twenty-two lecturers, seven instructors, with a large number of chiefs of service and clinical assistants, who also, in many instances, give instruction. Syphilis seems to have been included indifferently under venereal or genito-urinary diseases, and in these departments there were twenty-four professors, four clinical professors, six lecturers, and six instructors.

Leaving aside the representatives of the department of venereal and genito-urinary diseases, we find that, in contrast with a period prior to 1876, which we have taken as a basis of comparison, the number of teachers of dermatology has increased from twelve to eighty-six.

While this multiplication of professors of cutaneous medicine must be accepted as a tribute to the growing popularity of dermatology and an evi-

dence of the higher recognition of its essential importance by the profession, it is well not to take too optimistic a view of the situation. It becomes a proper subject of inquiry whether the methods of instruction as now conducted, and the clinical facilities as now organized in many of our medical schools, conduce to the cultivation of a sound knowledge of dermatology—whether the student is fitted by a thorough practical training for the ready recognition and the intelligent management of cutaneous diseases when met with in practice.

Does this extraordinary increase in our teaching organization denote a healthy and substantial progress, or is it a mere mushroom growth—delusive alike in its aspect of vitality and its promise of usefulness?

Notwithstanding this numerous and imposing professional array, there is cause to believe that there are many and grave defects in the existing system of instruction pursued in many of our medical schools. It is not the quantity, but the quality and sufficiency of the instruction—the actual working conditions and the practical results of the system—which constitute the criterion for the appreciation of its efficiency and value. Now, common observation shows that many, perhaps the majority, of graduates in medicine are launched into practice with the merest superficiality of knowledge, often in complete ignorance of the most elementary principles of cutaneous medicine.

For the successful teaching of diseases of the skin, it will be conceded that two conditions are essentially requisite: 1. Capacity of the instructor. 2. Abundance and variety of clinical material. As regards the competency of the instructors, we can not undertake to pass judgment. Many of the occupants of these professorial chairs are not known in the dermatological world; their names would fall strangely on the ears of the members of this association who are familiar with all contributions to the current literature of skin diseases. But I shall not indulge in the ungracious task of questioning the qualifications or disparaging the abilities of our confrères. Let us assume that all of the representatives of dermatology in the teaching faculties of our medical schools are well qualified, by thorough training, and a large clinical experience, to impart instruction in this important class of diseases.

But we must face the fact that, except in our large centers of population, the second and most essential condition of the successful teaching of skin diseases is unfortunately lacking; the majority of our medical schools are absolutely unprovided with adequate means for clinical instruction. However well equipped the teacher may be, however gifted with the power of imparting instruction, he may be handicapped by the lack of material for illustration and study. His lectures must perforce be didactic, and he is compelled to rely upon artificial portrayals of the subjects he teaches.

But, even in large cities, where clinical material is abundant, its advantages are too often dissipated by its division and dispersion into many separate classes. In the city of New York, for example, where many thousands of cases of skin disease are annually treated, clinical instruction suffers sadly from the lack of centralization. Instead of these patients being aggregated in one or more large central establishments, as at the St. Louis Hospital in Paris, for example, where they may be examined and treated by skilled specialists and made available for purposes of clinical study, they are dispersed

here and there in small groups in the different dispensaries, to the loss of science and to their own disadvantage, so far as skilled treatment is concerned. Another drawback to efficient instruction in skin diseases is the lack of special hospitals and special wards in general hospitals for this class of patients. Hospital experience is an indispensable condition for the thorough and satisfactory study of skin diseases. In no other way can the practical requirements of clinical teaching be satisfied.

The lack of abundant and varied clinical material and the absence of special hospitals are not the only deficiencies in the present methods of instruction in dermatology. For these defects the medical schools are not responsible; they doubtless do the best they can with the means at their command; but there are other defects in the organization of dermatological instruction which come directly under the control of the governing faculties of these institutions, and for which they are distinctly chargeable. It seems to me that one serious defect in the present method of instruction is the lack of system and proper grading in the order of studies. First and second course students should not be permitted to attend lectures and clinics in skin diseases. Only advanced students who have been thoroughly grounded in the elementary branches, with some practical knowledge of pathology and general medicine, are capable of fully appreciating or profiting by courses in dermatology.

The second deficiency to which I would call attention is the want of time and opportunity afforded for special studies. The short period of time ordinarily allotted to medical study by almost all of the medical colleges in this country precludes the possibility of the student devoting sufficient time to the study of special subjects. The schedule of lectures is so arranged that every moment is occupied with these subjects, a knowledge of which is deemed essential to meet the requirements of graduation. The chief ambition of the medical student is to obtain a degree, and the average student is quite content to acquire the minimum knowledge necessary; or, if more ambitious, he concentrates his efforts to pass a brilliant examination in the specified courses. He simply takes his cue from the faculty in gauging the relative importance of his studies, and he systematically neglects those not included in the requirements for graduation. The most serious obstacle to proper instruction in dermatology is the attitude of the governing faculties toward special studies. They have selected and set apart certain sections of knowledge which they deem most important which they prescribe as essential to securing a degree, while they seem to regard special studies as non-essential—as merely ornamental touches to an education, which may be acquired should the student so elect and be able to snatch sufficient time from his necessary studies.

So far as I am aware, there is not a single medical school in this country in which the study of diseases of the skin is obligatory; in none is a knowledge of this important branch of medicine required as an indispensable condition of graduation. Although many medical schools announce that students must undergo an examination in all branches taught in the curriculum, yet, so far as I am informed, a satisfactory examination in special studies is not essential to graduation. Questions relating to dermatology do not exist in the schedule of the examinations; the professor of this department is not

allowed to interrogate students, and has no voice in deciding upon their qualifications for a degree. I may state that the College of Physicians and Surgeons of New York has made the concession of allowing a single question relating to skin and venereal diseases to be proposed by the professors in these departments, but this is notoriously insufficient to test the knowledge of the student. In the Harvard Medical School a knowledge of certain special branches is required, and dermatology is placed among the list of elective studies, but examinations in this branch are entirely optional with the student.

We may well inquire why this unjust discrimination—why this gross inconsistency in elevating one branch of medicine to the dignity of an essential element of medical education, and an equally important branch to the position of a non-essential.

Certainly a knowledge of the great class of cutaneous diseases is just as important, just as essential to the physician in the discharge of his professional duties, as a knowledge of diseases of the lungs, of the digestive or nervous system. Why make the study of the one purely voluntary while that of the others is compulsory?

At the present time, when the question of a higher medical education, a more thorough training of the student, is the order of the day, when important modifications or alterations are proposed which shall lengthen the time of college instruction, secure a more complete and graded curriculum of studies and a higher standard of medical attainments, it seems to me eminently fitting that existing defects in the teaching of the branch of medicine in which this association is specially interested should be pointed out and remedies for their correction suggested.

The nature of these defects indicates the remedies. My own view is that it would be better for the interests of dermatology, better for the interests of the public health, if instruction in dermatology were abolished in all medical schools not properly provided with clinical material for illustration and study.

If these reforms indicated be not practicable, it becomes a question whether this phase of medical education as well as the study of other specialties should not be intrusted to post-graduate schools, which are springing up everywhere in recognition of existing defects in our present system of medical education. It is also a proper subject for consideration whether this post-graduate instruction can not be better and more efficiently carried on under the auspices and direct supervision of the medical colleges rather than by independent organizations over which they have no control.

In closing, reference was made to the subject of a revision of the nomenclature and system of classification of the association. While the evolutionary requirements of dermatology have necessitated the introduction of new names for essentially new diseases, a protest was made against the present neurological craze. The propriety of introducing special subjects for discussion at each annual meeting was suggested.

After the delivery of the president's address the first paper of the meeting was read by DR. R. W. TAYLOR, of New York, entitled **Observations on Prurigo, Clinical and Pathological.**

DR. J. C. WHITE, of Boston : I would ask how constantly there has been

urticaria connected with the other symptoms in this case ; and how readily the reader of the paper thinks prurigo might be confounded with that less rare condition, so-called papular urticaria.

DR. L. A. DUHRING, of Philadelphia : I have had very limited experience with prurigo in this country. Among many thousand cases of skin disease treated by me during the past twenty years, I have seen but one typical case of prurigo in Philadelphia, either in public or private practice. It is not because I have not looked for the disease, for I have desired to find cases. I do not wish at all to express disbelief concerning the observations of other gentlemen of other cities. The well-known case of Dr. Wigglesworth, in Boston, ten or fifteen years ago, was seen by me, as doubtless it was by most of the gentlemen present, for it was reported to this association at about its first meeting. The other case was similar, but, I regret to say, was never reported. These are the only two cases of prurigo which I have seen in the United States. Of course I have seen cases in Philadelphia considered by others as prurigo, but which I have always preferred to call cases of papular urticaria—an affection which has been only fairly well described in recent text-books, and about which the Germans and French seem to know but little. But one can hardly attend large clinics anywhere without seeing a certain number of these cases. They present a peculiar form of eruption, possibly worthy of the name once given it—lichen urticarus. The disease is not at all common in my city. I venture that one could see more of papular urticaria in London in a week than he could in Philadelphia in a year.

The case that was reported by Dr. Wigglesworth, of Boston, was so striking that I recognized the disease at once, and would rather class it under the head of prurigo ferox. The excoriations were marked and extensive—so extensive that it was impossible to make a study of the primary lesions. I looked upon it at the time as a neurotic form of disease.

DR. W. T. CORLETT, of Cleveland : I have not seen a typical case of prurigo since I was in Vienna. I have, however, seen two cases which I thought might be cases of prurigo with eczema supervening.

DR. E. B. BRONSON, of New York : I have been extremely interested in the papers read, and such contributions are of great value unquestionably. Nevertheless, in the very minuteness and care with which the lesions attending this disease have been portrayed, I am forced to say that I think even Dr. Taylor has added something to the terrors of prurigo as a subject of study. I believe that prurigo, as probably everybody admits, is in its essence a neurosis, and that fact must be kept steadily in mind ; further, that all these trophic changes that have been so elaborately described are purely secondary, on no one of which could we put our finger as an essential of the disease.

Very much has been said about the papules and other peculiarities of the eruption in prurigo. Such papules and just such lesions are seen in eczema in certain phases of the disease, depending on the peculiarity of the skin. Certain skins do not succumb to inflammatory irritation readily, and, instead of the ordinary irritative features of eczema, indolent hard papules, like those seen in prurigo, may appear.

In my opinion, only three factors are essential in prurigo, viz. : 1. Pruri-

tus. 2. Chronicity, or tendency to recur, commencing usually in childhood and continuing, in the majority of cases, throughout life. 3. Location. It is essential that the disease occur more particularly on the extensor or outer aspects of the leg and arms, exempting the flexor surfaces. I would insist on the fact that the trophic changes are only incidental, due to the peculiarity of the skin of the individual, and directly to scratching.

DR. H. W. STELWAGON, of Philadelphia: When a student at Vienna some years ago the presentation of cases of prurigo was an every-day occurrence, and I thought that if there was a disease I could thereafter recognize it was this one. Since my return to this country, however, and taking up the work of dermatology, I have not seen, out of a probable total of ten or twelve thousand skin cases, a single example of prurigo.

DR. J. T. BOWEN, of Boston: I saw a great deal of prurigo in Vienna at both clinics, and since returning home I have seen two or three cases which unquestionably would have been called by competent German observers prurigo in a mild form.

DR. R. W. TAYLOR, of New York: I am perfectly familiar with the case Dr. Duhring speaks of, although I did not see it. My first case was even a worse case than that. The man had been to Vienna, and Hebra had made a diagnosis of prurigo. I have seen two cases of milder form since.

During the eight months that this case has been under observation I have studied it carefully. I asked the mother whether she had ever seen any of these little pimples before the child began to scratch. She, a clear, sharp woman, replied Yes; she had seen them about the forehead and face; and when I pushed the inquiry, she said she had seen pimples upon the hands and arms before she saw the child scratching. Now, that is a very important point which I forgot to embody in my paper. I assured myself more positively on it shortly before I came away to attend this meeting.

The urticaria which I saw the child have once or twice was simple factitious urticaria. It was not an essential of the disease in this case, but simply an incident.

I must say that I am rather surprised and mystified at Dr. Bronson's remark about pruritus; he seems to have an idea that pruritus is prurigo, yet the German authors started out with the distinct postulate that pruritus is one thing and prurigo another. The view that prurigo is a neuritis originated, I believe, with Auspitz. It is not based on any pathological fact which has yet been discovered. Until the unity of the two affections can be proved, let us regard cases of pruritus as pruritus, and cases of prurigo as prurigo. It takes time to establish the diagnosis of a case of prurigo. The incidental lesions tend to obscure the case, and several observations taken in connection with the past history are necessary to establish the diagnosis.

DR. WHITE: I do not think the reader of the paper has yet answered my question—namely, in what way does he think this case differs essentially from cases of so-called chronic urticaria papulosa in children—a disease which he says is not very common, but yet is far more common than he considers prurigo to be.

DR. TAYLOR: Urticaria in children is attended with gastro-intestinal disorder, whereas this child was quite well at the beginning of the disease.

Moreover, the complications in this case constitute but an insignificant part of the *ensemble* presented to the eye. The child has had a few of these urticarial wheals simply from scratching, and then only localized, as on the buttock, and not as a general eruption at all.

That agrees with the description of the disease given by Hebra and others, that it begins with a form of wheals, and from that time on it is a chronic disease, characterized by rebelliousness to treatment, by its chronicity, by papules of various forms, by peculiarity in situation, with complications which arise from scratching of the papules, and from nervous irritability.

DR. WHITE: My interpretation of the condition in question is that it is one of urticaria, the urticarial lesions occurring only occasionally. They may have appeared at an early stage of the disease as a more marked feature. But certainly when one comes to examine such cases he may find, at a given time, no urticarial lesion whatever, yet the disease is what, I think, may be called chronic papular urticaria. Most of the lesions are secondary in character, the urticarial lesion being the exception.

A paper by DR. CORLETT was read, entitled **A Clinical Study of Pruritus Hiemalis—Winter Itch, Frost Itch, etc.***

DR. L. A. DUHRING: I quite agree with the speaker in regarding the disease as climatic. I originally held that view, and have no reason to change it to-day. I have failed to find that local irritation of any kind possessed any causative effect. We all are aware how irritants, such as flannel, will have a very positive effect in aggravating the disease. I am speaking not of this, but of the original cause. Nor have I noticed that the disease is in any way connected with urticaria. Some years ago, during cold winters, I saw many cases, but in none, as far as my memory serves me, was there a question of urticaria.

I have seen papers in the medical journals of former years and our own setting forth that the disease was brought on or aggravated by gastro-intestinal disorders of one kind and another, but in my own cases I can say that the disease appeared to be entirely independent of any such affections.

The explanation which the writer has given why certain parts of the body are exempt from the affection seems a plausible one. I think it quite possible that the exemption of the face, hands, and exposed parts is due to the fact that the skin here is tougher and better resists external influences, for this disease is doubtless due to peripheral irritation. Covered surfaces, on the other hand, especially certain well-known regions, are almost always attacked.

With regard to treatment, I may say that change of climate and local treatment are the only sources from which we can expect good results. Vaseline has proved as useful in my hands as any other remedy—more useful, possibly, than even medicinal preparations, such as carbolic acid, resorcin, and members of that group. It is one of the best remedies we have for controlling the local irritation. It doubtless acts by covering the skin and thus preventing the external influences from gaining access to the surface. From what I knew of the nature of the affection, I was led long ago to abandon internal remedies as useless.

* Will be published in a subsequent number of this Journal.

DR. J. C. WHITE: I will speak only of one or two points. So common has been winter itch, as it has been called always here in New England, that when Dr. Duhring first suggested the name *pruritus hiemalis*, I rather objected, as introducing an entirely unnecessary term in dermatology.

I do not see that this form of winter *pruritus* has diminished the last ten years in my clinic in Boston. It depends, however, upon what the weather may be during any one or successive years.

I should agree with the writer regarding the entire inefficiency of internal remedies, but I do not think that he has laid quite stress enough on the local dressing of the skin. He stated that in one of his cases silk dressing, he thought, did give relief. I look upon the character of the under-clothing in this disease as a matter of prime importance in its management. I do not allow flannel or silk under garments, but direct the patient to make no change in the summer under-clothing. He should wear next the skin linen or cotton, and put more clothing on outside of this in winter as the weather may demand it. Then I impress upon him the importance of keeping the atmosphere in the house moist. Where furnaces are used, as they are with us, measures should be taken to have an excessive amount of moisture imparted to the air from the radiators.

Then such local remedies should be used as will control itching. Among them, according to circumstances, I have found carbolic acid best. The patient should be taught the absolute necessity of avoiding scratching. One who has learned that lesson has got the disease, so far as its secondary manifestations are concerned, largely under control. My instructions regarding internal management are to avoid tea, coffee, and alcohol.

DR. HARDAWAY, of St. Louis: I believe the *pruritus* which arises from dietetic and various other causes and that which occurs during the winter are different things. There are cases of *pruritus* which occur during the winter season owing to a change of clothing and of diet, which is likely to set up this affection in a person of *pruritic* tendency. But that certain cases do occur from meteorological causes I have no doubt; they occur in spite of any change of clothing or internal management. Those of us who live in the West, or westward, are familiar with outbreaks in communities of affections producing itching, and I have on occasions gone purposely to certain localities to learn the nature of the so-called new disease. Some cases have been clearly due to scabies, etc., but many have been undoubtedly due to atmospheric changes, affecting large numbers of people at a time. The opinion has thus arisen among the local physicians that the affection was a contagious one. What the atmospheric conditions are which bring about such attacks I do not know. I suppose you have all observed that cold in itself has not always been able to produce it.

DR. F. J. SHEPHERD, of Montreal: I have seen a great many cases of the affection under discussion in Montreal, where we have pretty cold weather. I have been unfortunate enough to have suffered from it myself a good deal for the past thirteen years, but in a considerably mitigated form the last two years. The most important point is, as Dr. White suggests, the avoidance of scratching. But there are some nervous people who can not control themselves, and they are the ones who suffer most from it. During the last two

years the temperature in the North has been considerably warmer than previous years, and I have seen very little of this winter pruritus. With regard to the character of the under-clothing, I can also corroborate what Dr. White has said. But it is very difficult to make people wear linen with the thermometer 20° below zero. I had one case in a nervous individual where the secondary lesions were extreme. The patient applied the vaseline freely, and it certainly relieved him considerably.

DR. E. B. BRONSON, of New York, followed with a paper entitled **A Study on Pruritus.**

In an argumentative paper on this subject the following conclusions were arrived at: 1. That there was a sense of contact independent of the sense of pselaphesis. 2. That this sense of contact was the sense disturbed in pruritus. 3. That it concerned primarily simple cutaneous nerves or nerve-endings situated superficially and probably in the epidermis. 4. That the disturbance in pruritus was of the nature of a dysæsthesia due to accumulated or obstructed nerve excitation, with imperfect conduction of the generated force into correlated forms of nerve energy. 5. That scratching relieved itching by directing the excitation into freer channels of sensation, sometimes, especially when severe, substituting for the pruritus either painful or voluptuous sensations. 6. That the voluptuous sensations which might attend pruritus were a manifestation of a generalized aphrodisiac sense, representing a phase of common sensation that had its source in the sense of contact.

A paper by DR. BOWEN was read, entitled **Cases of Cutaneous Tuberculosis, with Histological Studies.***

DR. J. C. WHITE: This is a valuable contribution to the pathological anatomy of two diseases which are in some ways closely allied—namely, tuberculosis and syphilis. It is also a valuable contribution in a practical sense, exhibiting the multiformity of tuberculous lesions of which the examples given cover only a small part. As all bacillous affections of the cutaneous tissue, including leprosy and syphilis, exhibit great multiformity of lesions, this paper shows that tubercular affections are not an exception. Besides the lesions described in the paper, there are many others passed over for want of time. Another lesson to be learned from the paper is the value of inoculations and their danger.

DR. BOWEN: It was not intended to discuss the treatment in the paper. This form of verrucose tuberculosis in children would seem to yield to a much less radical treatment than does the verrucose tuberculosis of adults.

DR. J. S. HOWE, of Boston: I think the subject of treatment is a very interesting one. I have observed eight or ten cases of the disease during the past four or five years. The only practical treatment seems to me to be excision or the use of the curette. In four or five cases where the lesion was small I have operated antiseptically, and obtained union by first intention with very little scar and no return of the disease, some of the cases having been operated upon two or three years ago.

DR. F. J. SHEPHERD: I may mention a case which came under my observation this year. A man of about twenty-eight entered the hospital with

* Will be published in the December number of this Journal.

a tuberculous knee joint. Excision was performed. Some sinuses appeared which did not heal, and from these the tuberculous ulcer extended up the thigh. It was examined by the pathologist to the Montreal General Hospital, and the tubercle bacillus was found. Scraping and cauterization failed to arrest its growth, so amputation was resorted to six weeks ago, and, although the incision was made well above the ulceration, yet recurrence has taken place in the stump.

DR. L. A. DUHRING: A young gentleman had been under treatment in New York city for five years, and had undergone all manner of treatment of the most heroic kind. Amputation of the arm was proposed by one or two gentlemen. He was finally cured by curetting under ether, and remains well to-day. The operation was done thoroughly, and with the Esmarch bandage. It is now four or five years since the cure was effected. I have treated other similar cases by this method with success, so that I can express the opinion that it is the best method of treating this form of the disease.

DR. L. A. DUHRING read the next paper, entitled **Remarks on the Treatment of Dermatitis Herpetiformis.**

DR. H. W. STELWAGON: During the past eight or nine years I have had probably six or eight cases of this affection under treatment, mostly of the vesicular and bullous types. Neither internal nor local treatment has produced any positive effect. Some benefit has seemed to result from the administration of arsenic, and also from laxatives. The application of liquor carbonis detergens and liquor picis alkalinus, properly diluted, afforded the most constant relief.

DR. J. C. WHITE: I have treated a good many of these cases, and I think I feel less assurance of being successful with each succeeding one. It is very difficult to estimate correctly the exact influence of our treatment during a given period of the disease. I have tried the method of treating one side of the body only, or different parts with different remedies, and I have often noticed the side left alone get well as quickly as the other. I have never seen a case materially benefited by arsenic so far as I can remember. I have tried all classes of remedies addressed solely to the skin. We certainly may succeed in relieving the itching. Tar and the carbolic-acid remedies are often of great benefit in this direction. The sulphur treatment alone I have never tried, except in one or a few cases as a bath. I have used a mixture which contained oil of cade, sulphur, and alcohol—the old treatment of scabies—which relieved the itching, but I can not say that the attack was shortened.

DR. R. W. TAYLOR: I have derived better results in the treatment of dermatitis herpetiformis from laxative and derivative internal remedies, together with special regimen, than from any other method. I have derived great benefit from listerine and calomel applied to the surface. I have seen benefit result from the so-called Lassar's paste, in which carbolic acid has been substituted for salicylic acid. Resorein I have used in the same way. Sulphur I have not tried.

DR. HARDAWAY: In regard to internal treatment I can say nothing good. I have one patient now who has suffered repeated attacks of the vesicular

form who claims to have been benefited by Lassar's paste. Another says he has been benefited by a zinc solution.

DR. DUHRING: The chief point in the paper is the method of using sulphur. It is not its use as a bath or lotion, but by strong, vigorous friction, which constitutes the pith of the treatment. It has been my custom the past five or six years, in suitable cases—those of the vesicular or bullous variety, whether the lesions be few or many—to attack the whole of the skin with this vigorous rubbing. The patients may say they can not stand it, yet they generally do. The majority of patients are more or less relieved, and after one or two applications are willing to go on with the treatment. I have seen the lesions disappear from day to day and week to week, and that is what I mean by a cure. I would not expect any relief from sulphur baths or lotions.

As to the number of cases I have treated in this way I can not say. But I have been in the habit of using it in proper cases during the last five or six years. In the erythematous variety it rather tends to aggravate the disease. But the vesicular and bullous forms I do not hesitate to attack in a vigorous manner, breaking down the blebs and rubbing them away, continuing the rubbing perhaps an hour at each application. The more vigorously the surface is rubbed, the better.

DR. WHITE: I would like to ask Dr. Duhring whether he thinks he makes a decided impression in abbreviating the attack as a whole, or only the duration of the lesions. Also how long it is necessary to treat an attack.

DR. DUHRING: Distinctly upon the duration of the attack. A few of my cases got well and passed from my hands. Others were only relieved during the attack. It might be a matter of weeks or of months. I do not pretend to say that the treatment cures the disease so that we may expect exemption for life. I only speak of curbing the attack. The duration of the treatment varies.

DR. WHITE: I should think it would require a great number of cases to determine the effect of the remedy on the duration of the attack as a whole. I can understand how it would modify any individual lesion, but I should not under those circumstances think it had been the positive agent in abbreviating the attack. The last case which I have treated is a most intense one, and has been under observation continuously for a year. The duration of the attacks has varied from ten days to six or eight weeks. The severest ones may be of briefest duration, so that I am unable to judge whether my remedies have modified them in any way whatever. It is a most variable disease in its manifestations and the duration of the attacks, and for that reason we should be careful in passing an opinion on the value of our remedies in a given attack.

DR. F. J. SHEPHERD, of Montreal, read a paper entitled **A Case of Atrophia Maculosa et Striata following Typhoid Fever.***

DR. R. W. TAYLOR: This is a very extraordinary case, belonging to that class which are exceptional because not resulting from stretching of the skin, as does the linear atrophy of obesity, pregnancy, and ascites. It is very com-

* Will be published in this Journal.

mon to see these atrophic lines in young women and men. They occur in women about the belly, breast, and flares of the ilii. Here the rational explanation is the stretching of the subcutaneous tissue from pressure and movement of the skin. But in Dr. Shepherd's case there would seem to be a neurotic cause.

DR. WHITE : I have never seen atrophic portions of the skin hypervascular except in cases of violent and sudden stretching of the skin, as after severe distention from ascites. It was present in a marked case of ascites, in which the abdominal muscles seemed to be torn asunder by the violent coughing accompanying it. In cases of this kind the reddening is a marked feature, but I can not understand how such a vascular condition could be the result of a neurosis.

DR. E. B. BRONSON : Might not this be explained as the red hue of some forms of liodermia has been by Auspitz—namely, by disappearance of the stratum granulosum of the skin, permitting the vessels to shine through, as they do in the lips? I would ask whether there was more redness present in Dr. Shepherd's case than could be accounted for by shining of the blood-vessels through atrophied skin.

DR. SHEPHERD : Nothing more than that. There was probably a certain amount of stasis; the circulation was not very good.

DR. TAYLOR : In cases of atrophy of the skin from sudden stretching I have several times, in both males and females, seen the process begin with faint-red lines.

DR. DUHRING : Did these lines in the case reported in the paper become perfectly white and grooved?

DR. SHEPHERD : They became paler but not distinctly shiny; they were grooved.

DR. DUHRING : I have thought that I could understand the cause of the lesion in the cases which have come under my notice from time to time. You have all observed transverse direction of the lines in this case. I think they may take place in almost any direction, and I have no doubt, from what I have seen of the affection, that it may be due to different causes, and that stretching is merely one. I think a nerve cause is accountable for the affection in a certain number of cases, and possibly in this case of Dr. Shepherd's. These lesions seem almost identical with those in certain stages of morphaea. There the condition is unquestionably due to a nerve lesion.

DR. WHITE : Did Dr. Duhring say that these cases connected with morphaea have shown this redness?

DR. DUHRING : Undoubtedly they have shown the redness with less atrophy than in the more marked infiltrated cases.

DR. SHEPHERD : The interesting point in this case is that it followed an acute disease in a young subject. Since writing this paper one of my friends has told me of several cases occurring after fever. It seems strange that an affection of the skin following acute disease which is familiar to clinicians should be unknown to dermatologists. The probable cause in this case was a neurotic one. I have never seen tearing of the skin or this atrophy follow the forcible straightening of a contracted limb, although the force used is so violent that one might have expected it.

The next paper was by DR. WHITE, entitled **Immigrant Dermatoses**. (See page 369.)

DR. L. A. DUHRING : I am heartily in accord with the conclusions Dr. White has reached and the memorial which he proposes to bring before the association for consideration. The paper is of such length, of such nature, and has so many headings, that it is difficult to discuss it as a whole. I therefore ask attention to only one point which I am not sure that I understood rightly. Would the author have us regard lupus vulgaris as contagious?

DR. WHITE : Not from one person to another, but conveyed by auto-inoculation from one portion of the patient's body to other portions by habits of scratching and uncleanness. I attribute its multiple appearance in many instances to that fact, the history showing that the disease developed first on one part, then on another, to which it would be most readily conveyed by such habits. Regarding, as I do, all forms of tuberculosis as due to the presence of one bacillus, I can not conceive why any other form should be contagious and that of lupus vulgaris not contagious.

DR. DUHRING : Clinically my own experience is not in accord with Dr. White's on this point. I have certainly never seen any proof of transference of lupus vulgaris from one person to another by contagion.

DR. KLOTZ, of New York : In the bullous urticaria mentioned by Dr. White I recognize an affection frequently met with on recently arrived immigrants. The pustulous eruptions occurring on the legs of such patients very often, I believe, are nothing but purulently infected scratches. Scabies I should almost class among those diseases which are contracted during the voyage over the ocean. The number of patients affected with this disease applying for treatment in my dispensary practice has largely increased within the last five or six years, and a large number among them distinctly trace the origin of the itching to the sea voyage. The mattresses used in the steerage, which used to be brought on board by the passengers and afterward sold again by the stewards to the next passengers, probably afford the means of propagation. Concerning the greater frequency of certain skin diseases during the last years, I should like to call attention to the fact that the immigration from the very countries which furnish the immense material for the Vienna clinics—from Hungary, and the Austrian and Russian Polish provinces—has increased very rapidly within the last decade.

DR. C. W. ALLEN, of New York : I have had occasion in New York to see a large number of recently arrived immigrants, especially Russians and Polish Jews. I have been greatly impressed with the frequency of favus and scabies among them. Plica I have seen here, and little children of Russian parentage born here are allowed to develop the affection. I have seen some with candlestick masses of hair standing up over the head—a rare condition in this country. It is difficult to get the parents to cut off these masses of felted hair, since they have a notion that it protects against other disease. Bites from bedbugs on ocean steamers are not uncommon, and may simulate eruptive diseases and create a good deal of disturbance. Advanced and neglected syphilis is another condition we often see in immigrants. If I understood the reader rightly, he suggested that advanced syphilis was one of the

conditions which should be quarantined. I do not think it should be regarded as a contagious disease.

DR. F. J. SHEPHERD : I can corroborate the statements contained in Dr. White's paper. On entering the St. Lawrence, steerage passengers are vaccinated, and I have seen in some cases most marked cellulitis of the arm follow, even endangering life ; and this, too, when the patient was in robust health. I have always attributed it to a pus inoculation. There was a case in Montreal, during the epidemic of small-pox some years ago, of a man who, for the sake of gain, deliberately sold points taken from the vaccine sore after it had become pustular, and many severe cases of cellulitis were traced to this source. With regard to leprosy, I have seen within the last three years three cases in Montreal which came from the West Indies. I learned that they had been sent there for the benefit of a colder climate. One was a waiter in a large hotel for four years, when it was observed that something was wrong, and I was asked to see him, and found that he had leprosy. Many immigrants come by steamer up the St. Lawrence and go directly to Chicago.

DR. E. B. BRONSON : Some years ago I introduced the subject of skin disease among immigrants before the New York Dermatological Society by speaking of cases of what I called urticaria of immigrants. The term was a somewhat restricted one for the affection, as the manifestation of the disease in immigrants is not so much the effect of extraneous influences as from some internal disturbance. The cases which I have observed seemed to be of a neurotic nature, and the disease showed a marked tendency to recur ; apparently they were of the nature of an angio-neurosis, occurring independently of any local irritation of the skin. It seemed as though in almost every case I could reduce the initial form of the disease to an urticaria, with various subsequent lesions, the result of scratching. It frequently assumed the form of an urticaria bullosa. Why the disease occurs is an interesting question. I do not believe that it is due entirely to external irritants. It seemed to me that the factor having most influence was change of diet, for those patients whom I told to change their diet, making it conform as nearly as possible to what it had been at home, did best. Irish people, as we know, eat largely of potatoes, while on coming here they eat more meat. In them I stopped nitrogenous diet as far as possible, and, I think, with favorable results.

I object to including lupus in the list. Lupus is not a disease, as far as I know, which is contagious. It may be auto-moculable, but I do not think even that has been proved. The individual is, perhaps, alike susceptible in different parts of the body. A patient having lupus of the nose and acquiring it on the ear shows by this fact that the tissues are equally susceptible in the two places ; it does not show necessarily that there has been auto-inoculation. Perhaps it must be admitted that the disease is wholly due to contagion from the tubercle bacillus, but even of that I am not absolutely convinced.

DR. GRAHAM, of Toronto : Seasickness itself is a neuropathic trouble, and even where the usual neurotic manifestations are absent the skin may be involved. Thus there may be urticaria while seasickness is absent. It has

also occurred to me that constipation, which is common on sea voyages and which is a frequent accompaniment of skin diseases, may have had some influence.

With regard to leprosy, I was very much astonished this year to hear Prof. Jonathan Hutchinson assert that leprosy is due altogether to a fish diet, and quarantine is a matter of very little importance.

With regard to scrofulosis, I had opportunity this year of seeing about twenty cases, showing all varieties of the disease, and I think in one or two of the cases there was auto-inoculation. The cases were so convincing that I believe they are to be regarded as tubercular even from a clinical standpoint ; the way in which one form of the disease merged into another was to me a very striking illustration of the clinical manifestation of this truth.

DR. W. T. CORLETT : Regarding tinea favosa, I have not seen a case in an American, but have seen quite a number in Polish Jews. The only case I have seen in private practice recently was in a person who came from the south of France. Regarding scabies, I am of the impression that the disease is on the increase in Cleveland ; at any rate, more cases come under my observation. I have been somewhat surprised the last two or three years to find cases in cleanly people who bathe frequently. In some instances the disease was supposed to have been contracted in sleeping-cars. In this class of people the disease is likely to be mistaken, classed and treated as eczema, and be protracted in that way.

DR. HOWE : I think the discussion of immigrant dermatoses is interesting. Regarding favus, I have yet to see a single case in a native American ; they are all among Italians and Polish Jews. The question of a dermatosis arising from the bites of insects is interesting. Last week a young woman, recently arrived in this country, came to my clinic with a skin affection. There was an eruption on the hands, wrists, and neck ; on the hands and wrists there were bullæ as large as a ten-cent piece. They had undoubtedly been caused by mosquito bites, for the woman slept in a room where the windows were not protected. On putting in screens, the trouble disappeared.

DR. R. W. TAYLOR : There is one point which I would like to allude to. There seems to be a unity of opinion here that favus is mostly, and some of the gentlemen say only, seen in Polish Jews, and one who should read our Transactions would get the opinion that it was peculiar to that people. I can recall a number of cases seen by me during the last four years in private practice among people of our own nationality. So that while we see it mostly in the Pole, the Hungarian, and the Italian, we must not convey the impression that it is peculiar to them, or that native-born citizens possess immunity, for they do not.

THE PRESIDENT : There are so many important points brought up in this valuable paper that it is impossible within the limited time at our disposal to discuss them fully. As to the effects of vaccination in immigrants, there are two classes of cases to be considered—one in which the severe local as well as the systemic effects are due to some impurity of the virus. This assumption is by no means improbable and has been demonstrated in many cases. There is quite a large class of cases in which vaccination rashes are purely

incidental, depending upon the idiosyncrasy of the patient. We find that persons of a neurotic temperament, so to speak, are peculiarly prone to these irregular manifestations of the vaccine virus. It is not improbable that the neuropathic tendency which is created by a sea voyage and is manifest in the production of erythematous and urticarial eruptions, so often observed among immigrants, may also have an ætiological bearing upon vaccination rashes.

The suggestion of memorializing the Government with the securing protective legislation against the introduction of certain contagious diseases is, I think, a very excellent one. I would interpose the same objection which one of the speakers has already done with regard to including lupus among these diseases. I do not think there is any tendency to the extension or multiplication of cases of lupus in this country. My observations would go to show that the affection is comparatively rare in the United States.

The question of leprosy is certainly very important; and, in order to make the objects of this memorial effective, it is necessary that all the avenues of approach to this country should be controlled. As one speaker has suggested, a great many immigrants come from Havana and the West Indian ports through Canada; many come through Mexico. In fact, Mexico has furnished quite a large proportion of cases of leprosy which have been seen in New York. A very distinguished member of the American Public Health Association recommended last year that the United States purchase Cuba in order to control the principal source of yellow fever and leprosy; now I do not think it necessary to apply this suggestion to Canada and Mexico, but I do think the object of this memorial can not be effectively carried out without a mutual understanding between the governments of these countries.

The present regulation, issued by Surgeon-General Hamilton, for the examination and exclusion of leper immigrants, is, in my opinion, productive of very little good. In the more advanced cases of tuberculous leprosy, where the manifestations are upon the face, it may be possible to recognize the disease by an ordinary examination and prevent the entrance of such patients into this country; but in many cases there may be absolutely no evidence of the disease upon the face or parts exposed to observation, and indeed I think it would be impossible in the majority of cases to positively identify leprosy until it had existed three to five years, except by examination of the entire body. I have had an opportunity of seeing a great many lepers in whom the disease had existed a number of years, yet there were no manifestations which would be evident upon ordinary inspection of the patients. The present quarantine measures, therefore, are practically inoperable.

With regard to *tinea favosa*, and the *tineas* generally, I think that climatic conditions have a very marked influence upon their development. The atmosphere in this country is not favorable to the growth and spread of parasitic diseases. Moisture and warmth are two important conditions in their development. I have observed in Hawaii, for instance, where in certain localities it rains every day in the year, that these parasitic diseases are extraordinarily prevalent, and they are more prevalent on the windward side of the islands, where there is a great deal of rain. We can not attribute the extraordinary number of cases of parasitic disease in the South Sea Island-

ers to the influence of soil, water, or uncleanness, for the natives are almost amphibious, and therefore cleanly. According to my observation, *tinea favosa* is by no means confined to the Jews.

DR. WHITE: I do not know that I have anything to say with regard to special affections mentioned except in reply to some of the president's remarks. I think that the personal habits, not necessarily cleanliness or uncleanness, but rather the habit of body contact, will largely explain the greater prevalence of parasitic diseases among one people than among another. To show the independence of one of these affections of climatic influences, consider *favus*, a disease which is much more common in hot Italy and cold Scandinavia than in middle Europe.

With regard to my proposed memorial, I did not expect that it would commend itself as practical in all respects to all the gentlemen. These were my own views. I mentioned *lupus* because, as I stated yesterday, I regard it as belonging to *tuberculosis cutis*. Leprosy has been shown to be a parasitic disease, and this remark will in time, I think, come to apply to syphilis. Some forms of cutaneous tuberculosis may be much more easily inoculable than others, just as are some forms of leprosy, and I think some forms of syphilis are more readily inoculable than others. As to syphilis, my remarks applied, of course, not to the disease after it has ceased to be "specific," but in its contagious form. I hold that it is far more important to prevent the introduction of syphilis than leprosy. Leprosy, as a rule, affects only the individual; it is not communicated to other persons with facility, while syphilis is communicated with eminent facility. It is not only dangerous to one individual and to those with whom that person comes in contact, but also to his descendants, which we do not know that tuberculosis and leprosy are. I think there can be no more serious subject for consideration by this association and by the community than the prevention of syphilis. It is a grave mistake to suppose that it is a disease which should not receive open public consideration.

The subject of the memorial was, on motion, referred to a committee of three.

The next paper was by DR. R. W. TAYLOR, of New York, on **Reinfection of Syphilis**.*

DR. H. G. KLOTZ: It is a question in my mind whether syphilis might not, at this late date after the first infection, produce an eruption such as is seen in this picture without reinfection. I think it is not impossible. I think we should exclude all the papular syphilides before diagnosing reinfection, for I agree with Dr. Taylor that the greatest rigidity should be applied before considering a case one of reinfection. While, therefore, it is highly probable that this is a case of reinfection, yet I would not consider it one beyond doubt at all until it had the support of other cases.

THE PRESIDENT: There is very little to be said in the way of discussion on Dr. Taylor's case. I must confess to always having entertained a marked degree of incredulity with reference to most reported cases of syphilitic reinfection. I have seen one case referred to by the reader of the paper in which the fact of syphilitic reinfection seemed to be established beyond any reason-

* Will be published in this Journal.

able doubt, and the one reported to-day has been detailed with such minuteness and circumstantiality of detail as to admit of little doubt. At the same time I am firmly of the opinion that the immense majority of the cases reported as syphilitic reinfection have been wrongly interpreted. The error has been in some cases due to the desire of the reporter for notoriety, and a thorough sifting of the facts of the history of these cases shows that they are lacking in the elements which a positive diagnosis demands. Now, it is a notable fact that Prof. Fournier, whose clinical judgment is entitled to the highest respect and whose large opportunities for observing syphilis have been unexampled, is an opponent of the theory of syphilitic reinfection. His opinion, based upon such large experience, should carry a great deal of weight.

There is one very curious feature in the case related in the paper—namely, the development of typical papules upon a cicatrix. One would have supposed that in scar tissue in which the follicular structures of the skin had been destroyed the papules would have been very materially modified in appearance.

The possibility of acquired syphilis in a subject of inherited syphilis is not so difficult of belief as the occurrence of syphilitic reinfection. Speaking from analogy, there seems really no very good reason why a second attack of syphilis might not occur as well as a second attack of small-pox or other specific disease. Usually in such diseases the second attack is, I believe, very much milder than the first, but in the case reported by Dr. Taylor the symptoms are the reverse of this rule.

DR. TAYLOR: With all deference to M. Fournier's opinion, I may say that it is simply negative testimony. Even with all his large experience in syphilography he may not have seen any cases. Ricord first promulgated the view, I think in 1836, that a man could not have syphilis twice; but he retracted his opinion, and said that a person could have syphilis a second time. The breadth of his experience, I think, compares well with that of Fournier's.

The occurrence of the acquired disease in subjects of inherited syphilis is not common. I have gone over the literature, and the cases referred to in my paper are all I can find. I do not believe Hutchinson's cases were cases of such infection. Lang's case was reported just before the rash came out, and the case of Dowse is also of doubtful character.

Now, as regards the view that the second infection is a milder one by reason of the immunity which the system has acquired through the previous infection, it is based on very unsubstantial data, for this reason: that the majority of cases of reinfection are reported just as soon as the secondary rash comes, and we hear nothing of their course later on. Of the five cases which have been under my observation, one was seen by Dr. Morrow and other gentlemen at the New York Dermatological Society, and they considered it a very striking example. In that man the second attack was more severe than the first. In one of the two cases published in the Archives of Dermatology, about 1876-'77, the man died from the disease. Two others have been sorely tried. It thus appears that the opinion that the second attack is milder, as a rule, than the first has about as much basis of truth as have many of the

cases reported as being secondary infection. I have made a synopsis of all the cases reported as those of reinfection, and I may say that at least one half are apocryphal. There seems to have been an epidemic of reinfection in Russia, as so many cases have been reported within the last two or three years from there.

DR. KLOTZ : Perhaps my question was misunderstood. It was whether it is possible for a mild secondary form of syphilis to arise in consequence of the original infection. The patient having had ulcerations and gummatous eruptions in consequence of the original attack, may these lesions again be succeeded by a papular syphilide without reinfection ?

DR. TAYLOR : I have never seen, after the lapse of eight or eleven years, a miliary syphilide develop in the form of a general exanthema, as in this case. It was typical in all its features, and is rarely seen in the primary infections after the eighteenth month. All these lesions point to an exanthematous period of the disease. Now, I ask whether it is probable—after all undoubted secondary symptoms and osseous and fibrous lesions, after the trouble with the biceps, the long-lasting serpiginous syphilide, and the lapse of eleven years—that a generalized exanthema would develop in consequence of the original infection ? Such a supposition is hardly to be entertained ; it is in conflict with all clinical knowledge so far as my reading and experience go. The only hiatus in this case was that I did not find the scar, or red spot, or little thickening of the mucous membrane, or even a little catarrhal condition which signified the vanishing of the initial lesion. But the glands in the groin were very much larger than elsewhere, and that is pretty good proof that the point of entrance was in some part of that system in which the lymphatics going to that part terminate. So I say the point of entrance in the second infection was in the genitals.

The general enlargement of the glands over the body was also typical—the epitrochlear, the post-cervical, the anterior auricular, the posterior auricular, mastoid, etc.—so that, taken in connection with the eruption, and other points in the case, no other conclusion can be drawn than that it was a case of reinfection.

The next paper was by DR. JACKSON, of New York, on **Electrolysis in the Treatment of Lupus Vulgaris**.*

DR. C. W. ALLEN : I have very little to say about the method, for it is one which I have never employed. I have been so much pleased with multiple linear scarification, followed by *emplastrum hydrargyri*, that I do not think I shall now change it for the method of electrolysis. I do not think that the advantages of the latter, so far as the reports show, would warrant it.

DR. HARDAWAY : Perhaps six years ago I commenced the use of electrolysis in the treatment of *lupus vulgaris*. But this affection is very rare in St. Louis, and I have seen comparatively few cases, and for that reason I have not been able to push my investigations very far. Many cases which I have commenced to treat have disappeared from view, and the disease is such a wretched one to manage, on account of relapses, that I have almost despaired of any successful treatment. Nevertheless, I have reported from time to

* See page 416.

time during past years the use of electrolysis. My method of using it has been entirely different from that which Dr. Jackson speaks of. I have used the single needle. It has been, however, mainly for the purpose of attacking the nodules, and for that purpose I think is quite as good as any method which has been advocated: I think equally as good as boring with Dr. Fox's dental burr. Where there are large patches, my method might be open to some criticism. I use two methods invariably—namely, electrolysis in puncturing, and the sharp spoon afterward. It may be that the sharp spoon has been the efficient agent. I thought that sometimes I had pretty good results, but, so far as relapses are concerned, I do not think there has been any advantage. About the only advantage of the method is that it is bloodless; possibly it hurts a little less, but it is not painless by any means. With rhigoline, or a local anaesthetic of some kind, I presume it could be rendered comparatively painless. Hemorrhage and the dread of an operation are avoided by this method. In lupus erythematosus—which, however, is not before us for discussion—I have used the method with advantage.

DR. E. B. BRONSON: Since the author has alluded to the case which I saw treated by this method, I will simply say that the result has been most excellent in the parts operated upon—as good as could be obtained by any other method. I expect to try the method. It occurred to me, however, that it might prove equally, or even more, efficient in lupus erythematosus.

DR. W. T. CORLETT: I have used electrolysis in the treatment of lupus vulgaris, but not systematically. I have used an ordinary needle, after the manner of Dr. Hardaway, but I have found it a painful and slow method. It has seemed to me that it has no advantage over some other methods, and is not as good in that it requires a great deal of time. A year is rather a long time to treat a case of lupus vulgaris, unless it be very extensive. The method which I have found most efficient is to scoop out the diseased structure, and afterward touch the parts thoroughly with carbolic acid. That is, of course, painful. It is necessary to put the patient under an anaesthetic, but the results have been very good in the few cases in which I have tried it. Scarification was practiced by me for some time, after the manner of Vidal, but during the past year I have given it up entirely, not being able to get the results which have been claimed for the method.

DR. JACKSON: I may say that in one case, by way of comparison, two methods were practiced: Electrolysis was tried on one side, and scooping out and application of pyrogallie acid on the other side. A slough formed on the nose where pyrogallie acid was used, while where electrolysis was employed the parts were left smooth. I think you will like this method, if you employ it with sufficient patience.

THE PRESIDENT: I have had no personal experience with the method of treating lupus by electrolysis, but I am disposed to regard with a good deal of favor, and perhaps with some enthusiasm, any method which promises such good results.

Since one of the gentlemen has expressed his dissatisfaction and disappointment with the results of the treatment of lupus by multiple scarifications, I deem it but proper to give my own testimony in favor of this method. I have employed the method of scarification in a good number of cases for

many years, but I am satisfied that I have used it more intelligently and successfully since I had the opportunity of observing the technique of the operation under Vidal. He operated on about sixty cases each week, and for several weeks I had an opportunity of seeing these cases and of familiarizing myself thoroughly with his method—the depth to which the incisions should be carried and the various details of treatment which can be gained only as the result of a large clinical experience. The after-treatment Vidal regards as of scarcely secondary importance to the scarification.

The chief objection to the use of the curette about the face is, in my opinion, that the resulting scars are almost always disfiguring. They are dense and contractile, and, for cosmetic reasons, they are very objectionable, especially in women. A large proportion of the cases of lupus vulgaris which I have treated have been in women.

Any method, then, which has the merit of novelty, and which promises such good results as have been described in the paper, should be tested, and, if found serviceable, should be welcomed as a valuable addition to our present often unsatisfactory methods of dealing with this formidable disease. I may say that quite a number of cases of lupus seen by me have existed a long time, and, I believe, are incurable by either scarification or electrolysis.

DR. DUHRING : I should be pleased to hear from the president the peculiarities of the after-treatment referred to.

THE PRESIDENT : The peculiarities of the after-treatment are the use of a spray of bichloride and of the red cinnabar plaster, which Vidal thinks much more efficacious than the ordinary mercurial plaster. The precise composition of this plaster has been published frequently. Of course, no specific virtue can be attached to any preparation in the treatment of lupus ; the superior results are, in my opinion, due to the fact that it is worn almost continuously during the intervals between the operations, usually from five to seven days. Better effects are derived from the continuous influence of this mild preparation than from applying a strong irritant preparation with a view of getting an intense degree of inflammation, and following it by a mild application, as is done with the salicylic plaster and the ordinary emplastrum hydrargyrum.

DR. J. C. WHITE : I have had no experience with electrolysis. I would like to ask the reader whether he applies it where there are large open surfaces.

DR. JACKSON : I have had no experience at all in ulcerative cases.

DR. WHITE : I would also ask as to its use about the *alæ nasi* and close to mucous surfaces.

DR. JACKSON : In the one case which was so very extensive the lesion has recently begun to attack the nose, and has even extended inside the *alæ*. I have applied the treatment there too ; it hurts a good deal more, but that is all. I have not treated mucous surfaces, but behind the ear it has left the skin quite smooth.

DR. WHITE : So much has been claimed by some French writers of the great success of scarification, and the president has had such excellent opportunity to witness the results of the method and the details of the operative procedure as practiced in France, that it is almost a satisfaction to hear his

admission to-day that he does not find it so uniformly successful. It is easy to destroy a tubercle of lupus by external applications, yet it is a very difficult thing when we come to address remedies to a case in all its stages when it has lasted ten to twenty years. I have found no method more satisfactory on the whole than that of Professor Hebra, by the use of the stick of nitrate of silver. I use it more confidently than any other, and always come back to it as the most reliable method in active stages of the disease.

DR. DUHRING: I would ask Dr. White whether he still holds the views he expressed before the association a few years ago as to the value of the treatment of this disease with corrosive sublimate.

DR. WHITE: I do. I am using corrosive sublimate and salicylic acid constantly, and in some forms of the disease with success. In other forms it is not so satisfactory. I always begin the treatment of a case of lupus with these methods. In a large proportion of cases I use no other, for I get better satisfaction from them on the whole than from any other. I moreover find that I can use these remedies over a large ulcerative surface where no other remedies can be employed so well, although I do not get as rapid results in such forms and stages of the disease as I do in the primary tubercular forms. But I still do use parasitocides constantly. I use salicylic acid mixed with vaseline or dissolved in castor-oil, spread on lint, applied on a small or large surface over night. I use corrosive sublimate always in the form of an ointment over small areas, generally at night. Two grains to the ounce is as strong as I ever use it near the mouth, for it is there liable to produce a mild grade of salivation.

DR. H. W. STELWAGON read a paper on **Plica**.

DR. L. A. DUHRING: The reader of the paper expresses himself as being in doubt as to whether this can properly be called a case of plica. As I understand the use of this term, it seems to be altogether appropriate in this instance. The case seems to present all the features of one form of plica—the form seen in Europe much more frequently fifty years ago than it is now. I do not regard this as being a unique case at all. A more common form is where all the hair of the scalp is involved in multiple matting together. In this country I have seen very few cases of marked plica. I have seen a number of cases in Austria. I have always been in the habit of looking upon the condition as a pathological state which we knew but little about. I have never associated them in their pathology with pediculosis, although this is often present. The cause of this peculiar matting together of the hair is, I believe, unknown. I have never seen any resemblance to it among native-born Americans.

DR. J. C. WHITE: I never saw a case of so-called plica. We were taught by Hebra that there is no such disease. The condition might be caused by some different arrangement of the cells of the cuticle of the hair, corresponding to that of the hairs of those animals in which natural felting or matting takes place. I would ask the reader whether any special attention was given to the arrangement of the cells of the cuticular layer.

DR. STELWAGON: No.

DR. E. B. BRONSON: I think there is no question whatever about this being a case of plica. The illustration given in Alibert's Atlas of *plica*

polonica longicauda is not unlike this except that it includes larger masses of hair. I have myself, so far as I can recollect, seen but a single case. It was in Charity Hospital a year ago, on the head of a Polish Jew, who had suffered a number of years from favus. The tuft grew from the occiput, the surrounding region being quite bald. As well as could be learned from a person who spoke unintelligible German, he had had this condition a long time. The hairs were matted together very firmly, so that they could not be separated. They were distinct at the scalp, became matted, but separated again at the end. The length of the lock was perhaps two inches. I supposed in that case that it was a filth disease, the hairs having been matted together by extraneous substances. But it has seemed to me that so good an observer as Alibert could not have mistaken a simple matting together of the hair from filth for a special morbid condition which deserved a particular epithet, and the suggestion made by Dr. White has seemed to me a very rational one.

DR. C. W. ALLEN : In 1879 I saw a case at the workhouse on Blackwell's Island, in either an American girl or an Irish girl of about twenty-eight years of age. She had syphilis, and a bone lesion of the forehead. She presented a marked case of plica; the whole hair was matted together, forming a thick cap, covering the entire scalp, and resembling the thick piece of felt often placed under beer-mugs, but thicker. Beneath, the surface was foul and excessively disagreeable to the nostrils. I regarded that case, as I have those which I have seen since, as simply the result of uncleanness and neglect, an exaggeration of that condition which we see sometimes in bedridden cases where the patient can not comb her hair for a long time. A like condition is often seen in Russian and Polish Jews. A woman with syphilis, mentioned in the paper on Erysipelas, which I shall read, had lost all the hair of her head except a spot of about three inches in diameter, and this formed a complete plica. It had not been cut or touched for years, and she would not allow it to be molested.

DR. STELWAGON : I expressed my doubt as to its being a case of plica for the reason that I had obtained my conception of that state from the teaching of such men as Hebra, or those who looked upon it as a disease of filth, particularly of pediculosis, while in this particular instance there was absence of pediculosis and of filth.

A paper by DR. ALLEN was then read, entitled **Treatment of Erysipelas.**

DR. W. A. HARDAWAY : My experience has been confined mostly to the cutaneous varieties of the disease. I am absolutely skeptical in regard to any specific treatment. At times I have instituted one form of treatment, then another, and have even been on the point of writing a paper showing my success, but with further experience I have grown again doubtful of the benefit of the method employed. Some years ago cases seemed to terminate well under a mixture of ichthyol, ether, and collodion, but I would find that the next series did not do so well, and so with other remedies. I think the essential point in the treatment of the ordinary forms of the disease is to give as much relief to the patient as possible, and this is most readily accomplished by remedies which exclude the air. Ordinary flexible collodion has been as efficient as any, in my experience. Another remedy suitable for

that purpose is ergot, or a fifty-per-cent. solution of ergotine. A lotion of carbolic acid may give relief, also chalk ointment with a small amount of carbolic acid.

DR. H. G. KLOTZ : I believe that the principal object of treatment should be the relief of the pain, which may be very severe. I prefer the compound tincture of benzoin, recommended, I think, by Dr. Taylor, with or without the addition of one per cent. of corrosive sublimate. This is especially useful if a thin layer of cotton is placed over it to exclude the air. Collodion has a tendency to crack and tear the skin.

As to scarification, I think it is better to make the incisions diagonal, crossing each other at several points, making a kind of fence, as it has been called, in healthy skin, for which purpose instruments shaped like a comb have been designed by several physicians. I find the effect of the lead lotion is greatly increased by the addition of boric acid, from one per cent. to saturation.

DR. F. J. SHEPHERD : I have seen a good many cases of erysipelas in surgical cases. I have tried many kinds of treatment—carbolic acid, white paint, scarifications, etc.—but have always come back to the lead-and-opium lotion, applied hot and kept on constantly. This, with iron and stimulants internally, is the usual routine treatment in hospital practice. In cases of true erysipelas the disease is constitutional, and I do not believe that it can be arrested by local treatment. With regard to individual cases, I think some are destined to prove fatal from the beginning ; broken-down alcoholics with facial erysipelas will likely die of pneumonia, whatever may be the treatment employed. I would ask Dr. Allen whether he has seen any cases of erysipelas accompanied by acute desquamative nephritis. I have seen one where, as the desquamation of the skin of the face took place, there was a similar desquamation in the kidney, blood casts being abundant in the urine.

DR. R. W. TAYLOR : I have been rather astonished, first, at the extraordinary number of cases of erysipelas which Dr. Allen has had ; second, at these remarkable results. I think a good deal of care should be exercised in the use of the bandage of adhesive plaster, because compression might set up thrombosis and gangrene.

DR. E. B. BRONSON : I think it is a matter of some importance, in the first place, to discriminate between the different forms of erysipelas. There is under very many circumstances a tendency to develop what may be termed erysipelatous inflammation, such as may occur in connection with a suppurative wound or discharging sore in which the discharge had been arrested. Such cases run a simple course, incline to heal spontaneously, and in estimating the results of treatment we should discriminate between them and those severer ones accompanied by constitutional disturbance.

I can only say that, so far as my own experience goes, I have been more in favor of resorcin than of any remedies which have come up recently. A pretty strong watery solution is the form I generally prefer, and it has seemed to me that the effect has been better than from ordinary lead-and-opium wash.

DR. J. C. WHITE : Before one reaches the conclusion that it is useless to

treat erysipelas or that remedies do no good he should establish the normal course of the affection in the average case. My experience is confined wholly to ordinary facial erysipelas of mild or severe cases as it comes to the clinic. I have seen every year for a number of years a considerable number of cases, and, as already stated in discussions of the subject at past meetings of this association, I have treated, and have continued to treat, cases in one way. If, as Dr. Hardaway has said, erysipelas, if left alone, gets well in seven days, while under my treatment it uniformly disappears in two or three days, it may be claimed that the treatment produces the difference in result. When the fever subsides, the gastric disturbance subsides, and the cutaneous manifestations disappear, I call the case cured, and I expect to accomplish that on the average within two or three days. And, as I have stated on previous occasions, I never give any internal remedies. I uniformly treat all cases with a solution composed of a drachm of concentrated carbolic acid in half a pint each of alcohol and water applied on thin compresses, one thickness of cloth kept on and wet the whole time or alternate hours. I am constantly showing cases to students on one day and requesting the patients to come back within two or three days, and in nine cases out of ten they are cured. Now, if it be the natural course of erysipelas to end in two or three days, our remedy has had no effect; but if that be a shorter period than it pursues under ordinary circumstances or under other methods of treatment, it may be assumed that this one is superior. I am speaking of well-marked cases with high pulse, high temperature, marked erythema, running in some instances into the bullous form of cutaneous disturbance. Cases may be so sick that they can not go out, but my remarks do not apply to them, yet I am speaking of true erysipelas. I may add that I believe that the parasitic element of erysipelas is destroyed by this method.

DR. F. J. SHEPHERD: I should like to ask the members as to their experience of the infectiousness of these facial cases. I know of a case of facial erysipelas in the medical ward of a general hospital communicating the disease to a patient on either side of him. One of these cases proved fatal. In neither case was there a known lesion of the skin. One was suffering from some lung affection and the other from locomotor ataxia.

DR. WHITE: I remember asking, when the subject was up for discussion in the association some years ago, whether any of the gentlemen present could recall a case of facial erysipelas which had been communicated to any other member of the household, and only one of the gentlemen could say that he knew of such a case of his own personal knowledge.

DR. C. W. ALLEN: As to renal trouble, there was no evidence of it in any of my forty-seven cases. As a rule, I did not employ internal measures except as symptoms required. I think that by external treatment we can do all that is required. The turpentine was not used in my own practice, but in some cases in Charity Hospital, until it was found not to do good. My facial cases were not uniformly cured in seven or eight days. Some ran quite an extended course, but some terminated abruptly in two or three days, and these lowered the average duration. The alcohol in the treatment recommended by Dr. White has been highly spoken of by others. Absolute alcohol has been applied as a spray, also as a dressing, with reported good results. Most of my

cases of facial erysipelas, differing from those mentioned by Dr. White, were severe when first seen. They were usually in bed and unable to go out. In some the eyes were closed; some were in a state of delirium, lasting not only during the night, but also during the day; and there was usually high fever. If my table included all cases that come to the skin class, the average duration would be lowered, for I am sure I have seen cases in the beginning which under treatment failed to run the usual course.

DR. WHITE read a paper entitled **Notes on Pilocarpine in Dermatology.***

DR. HARDAWAY: Some years ago I made use of this remedy, but afterward gave it up. I gave it in doses of about an eighth of a grain in ichthyosis, eczema, alopecia, and more especially in pruritus; but my experience was not such as to lead me to continue it. In some cases of pruritus there was some alleviation.

DR. H. W. STELWAGON: My experience with pilocarpine has been rather limited. I recall using it freely in ichthyosis, especially in mild types of the disease, and I think with some benefit. In alopecia areata, and in ordinary alopecia, I have tried it repeatedly, but always with negative result.

DR. C. W. ALLEN: I fell quite out with pilocarpine early in my career. In 1880 a patient presented himself at the clinic in Vienna who had generalized alopecia, without a hair on the body; and, the students having been dismissed, Professor Neumann said: "We will try on this man injections of pilocarpine," which he proceeded to do. The man soon grew pale, broke out in profuse perspiration, the saliva poured out, he vomited, asked for the water-closet, had diarrhoeal passages, passed a good deal of urine, and was generally in a bad condition and unable to go home for some time. That case produced such a disagreeable impression on my mind that I have never employed the drug for a similar purpose in dermatological cases.

DR. G. T. JACKSON: I have used jaborandi a good deal in alopecia areata, but it is difficult to judge of the effects of treatment in these cases. I have seen the hair grow, but whether it was due to the drug I can not say; but in ordinary alopecia I have never seen any benefit result from its use.

DR. L. A. DUHRING inquired as to the unfavorable results said to follow the use of pilocarpine in some instances, and whether the reader of the paper could tell what was an approximately safe dose.

DR. H. G. KLOTZ: Some salivation followed in one of my cases; the dose was then reduced, and no further complaint was heard. A tenth of a grain would be a proper dose to begin with. This usually kept the skin sufficiently moist. Not much larger doses were required when given by the mouth.

DR. C. W. ALLEN then presented a **Report on Aristol.**

DR. W. A. HARDAWAY: I have used aristol the last few months in psoriasis only, with vaseline and some almond oil as an excipient, also with colloidion; but my results have not been very satisfactory, and I have returned to chrysarobin.

DR. R. W. TAYLOR: I am cautious about these new remedies, and do not employ them precipitately. I tried aristol in a case of soft chancre in my office. In chaneroid its action was about the same as that of iodol; it formed

* See page 409.

a crust, and under the crust the ulceration went on. In another case the man had localized gangrene attacking a hard chancre. The resulting ulcer was not controlled at all by aristol, but when I put on it equal parts of boric acid and iodoform it healed up very readily. Dr. Allen's report is very interesting, but there is this to be remembered about condylomata lata: that if you clean them and paint them over with collodion without any aristol, iodol, iodoform, or anything else, they may do well. My own impression of aristol is that it is not more potent, not as potent in some cases, as subnitrate of bismuth or oxide of zinc; but I should want longer time before giving that as a final impression.

DR. F. J. SHEPHERD: I have not used aristol at all, but was impressed with the statement that a case of ulcer the result of a burn was treated forty-eight days. Now, this is not a particularly brilliant result. Surgeons nowadays rapidly heal such cases by means of skin grafting after Thiersch's method. My experience with iodoform has not been favorable in cases of ulceration; it produces exuberant granulations, and is only suitable for application in fresh wounds. Naphthalin has given good results.

DR. R. W. TAYLOR: That is a good point: iodoform does no good after granulations have formed. It is only in fresh and unhealthy wounds, chancres, chancroidal and tuberculous ulcers, that it is indicated.

DR. G. T. JACKSON: I have tried aristol in a number of cases of ulcers. In some cases where both legs were affected I have tried it on one leg and an older remedy on the other, and in every case healing took place under the older method first. I tried it in ringworm in hospital cases. The house surgeon thought it had improved one or two cases, but, as I went off duty, I can not speak of my own knowledge. It seems to me the reports of its use in syphilitic ulcers can not be depended upon. In the reported cases it has been combined with other active treatment, and it is difficult to say how much the result has been due to aristol and how much to the iodide or mercury.

THE PRESIDENT: I can contribute only a comparatively limited personal experience with this new drug. I have used it in some cases of chancre, of chancroids, and of ulcerative syphilides, and as a dressing for lupus and epitheliomatous ulcers, after scraping or curetting. The cases of chancre have progressed very favorably under its use, but I do not assume that this was due to any remarkable virtue in the drug, since chancre tends to get well spontaneously within a certain time. The patients, however, were very much pleased with the powder, which is inoffensive, and furnishes a very admirable dressing.

I have employed it very freely in lupus and epithelioma after thorough curetting, but I have never observed any marked irritant effect referred to by one of the speakers. I think it is mildly stimulating; less so than iodoform. The most valuable influence of the drug is its tendency to promote rapid cicatrization. I have recently had very satisfactory results in a case of epithelioma involving the orbit. The ball had been removed some time previously, and the disease had broken out afresh in the orbit and extending over the superciliary ridge. There was quite a large growth protruding from the inner canthus. This I removed, and curetted the parts very thoroughly,

but for some time afterward the patient was troubled exceedingly by a profuse secretion, which quickly saturated all the dressings I could possibly stuff into the cavity, and flowed down over the cheek. By the free use of aristol powder the secretion was markedly diminished. The patient within twenty-four hours after using it expressed great delight with the result. Cicatrization took place, I think, much more rapidly than it ordinarily does after curetting.

Notable among the cases of ulcerative syphilide was one in which there were large and numerous pustulo-crustaceous lesions on the scalp. The use of mercurial ointments gave no appreciable benefit. Finally, I employed aristol with very satisfactory results, the lesions rapidly drying up and cicatrizing. The patient was taking mixed treatment at the time, which doubtless contributed to hasten the curative result.

I regard aristol as a very admirable dressing. I am not prepared to speak as to the entire range of its curative action or to the precise class of cases in which it is indicated. The experience of those who have experimented with it largely is that it is practically inert in chaneroid, and also in psoriasis. But in tertiary syphilides, especially those of an ulcerative character, the general testimony is in its favor, and I may say that in selecting cases for testing the drug I chose those in which its good effects had been demonstrated by the experience of others. Possibly a still larger personal experience might modify to some extent my very favorable impression. According to my observation, it may be employed with perfect immunity on delicate structures. In the case of epithelioma of the orbit referred to I used it in powdered form, and it certainly came in contact with the conjunctiva of the other eye, but produced no irritant effects. My own impression is that it is a drug which certainly deserves a more extended trial, and I think it will prove a very valuable agent in cutaneous therapeutics.

DR. C. W. ALLEN: I hope the gentlemen understood that I do not wish to claim too much for the drug in dermatological cases. I think its application is rather in syphilitic ulcers, ulcers of the leg, etc.

By invitation, DR. C. C. RANSOM, of New York, made some **Remarks on the Use of the Richfield Waters in Dermatological Cases.**

DR. C. W. ALLEN said that four years ago he spent the summer at Richfield Springs, and had observed in some cases a marked depressing effect from a prolonged bath in the sulphur water. He then got the impression that the waters were useful in certain eczemas and acne. One man, not his patient, claimed to have obtained much benefit from the baths in syphilitic eruptions, and had returned several seasons, as a prophylactic measure.

DR. F. J. SHEPHERD, of Montreal, had found the sulphur baths here, and also at Banff, in the Rocky Mountains, cause more profuse perspiration than any simple hot baths he had used. The after-effects he found to be depressing.

DR. C. C. RANSOM, on being asked whether the sulphur baths were more useful than simply hot water, expressed the opinion that they were; that they acted with greater effect on the excretory function of the skin. This was shown in many cases by experience. He said he made the bath of short duration, because when prolonged it was followed by marked depression. He

had no theory to offer in explanation. No other treatment was employed in the cases reported except in one in which Blanchard's pills were administered.

The following gentlemen were elected members of the association : DR. JOHN A. FORDYCE, of New York ; DR. C. W. CUTLER, of New York ; DR. M. B. HARTZELL, of Philadelphia; and DR. J. GRINDON, of St. Louis.

The officers elected for the ensuing year were : *President*, DR. F. B. GREENOUGH, of Boston ; *Vice-President*, DR. L. N. DENSLOW, of St. Paul ; *Secretary and Treasurer*, DR. G. T. JACKSON, of New York.

Selections.

The Future of Dermatology.

IN the Dermatological Section of the meeting of the British Medical Association of the current year the address was made by Jonathan Hutchinson on the above subject.

The object of his address was mainly to point out the value of dermatology as a field for clinical observation, and as a department of general medicine.

He showed what the laws were which governed the study of dermatology, and how rich a field it formed for the student. The aim of all true-hearted specialists was to break down the walls of specialism. He referred in illustration to the instructive nature of the group of maladies known as herpes, and the peculiar influence of arsenic upon it. Despite the etymology of its name, no true herpes ever creeps or spreads in the least. What was seen in a large majority of disorders of the skin led to the belief that common inflammation, however produced, was more or less infective. His belief was that it was possible to exaggerate the importance of the doctrine of the infectiveness of common inflammation.

Treatment should rather be aimed at the repression of local inflammation, and at preventing dissemination by infection. He referred to the action of inheritance on skin diseases, and said that Kaposi's disease was one of the best examples of "family disease," which he said simply seemed to be the inheritance of a skin that would not bear exposure to sun and air. Then, again, the battle of the hypothesis of cancer would have to be fought out on the skin, and rodent ulcer might indeed, by itself alone, form an epitome of our knowledge of the subject. In melanosis the picture was completed, and the infection of the blood was seen in its fullest energy. He next referred to the opportunities offered in connection with skin diseases for the study of therapeutics and for observations on the action of drugs. Arsenic, of course, stood foremost among those concerning which we have collected important and even astonishing facts.

There was no more wonder-producing fact in the whole range of therapeutics than the ease and rapidity with which arsenic contracts and cures common pemphigus. There may occasionally be exceptions, but, as a rule,

not another bulla appears after the remedy has been commenced. We have, indeed, ceased to see any cases of "chronic pemphigus" since this fact has been made known. How the drug acts we know not, neither do we know the real nature of the malady which we cure. It does not always cure it, but it always changes it for the better. He who would unravel all the mystery of how the bullous eruption may be cured and the scaly one changed, how the skin may be made to clear up in one case and muddy and brown in another, how peripheral neuritis may be produced to end finally, unless prevented, in some severe form of paralysis and death, and how in rare instances the nutrition of the skin may be so influenced that keratosis and even cancer may be the result, will certainly find that he has his work cut out for many years.

In the study of dermatology he pointed out that we have in the first place to avoid narrowness and specialism, and in the second place to develop to the utmost our knowledge.

Only the foundation of the subject has as yet been laid.

More minute examination was needed in every direction, and the careful examination and record of clinical facts exactly alike.

All possible aids must be invoked.

The microscope, the photographic camera, the artist's pencil, but, above all, the trained eye and the pen of the skilled and patient observer, must be brought into full use. No one can make the attempt to classify skin diseases without soon perceiving that many well-recognized forms claim a place in more than one group. We are engaged in a very different task to those of the zoologist or botanist, though, after all, the differences are only in degree, and they encountered the same difficulties, only to less extent. They, like ourselves, have to recognize connecting links, hybrids, and mongrels. In order that dermatology should prosper as a part of medicine, it is essential that we should learn to use our names lightly. Nothing has more impeded the progress of dermatology, nothing makes its study more repellent to the student, or its knowledge more difficult of attainment, than the habit of giving an arbitrary name to every little group of phenomena, treating that name as if it represented a substantive and isolated reality, and insisting that the facts of disease should be made to group themselves in accordance with our conventional nosologies.—*London Lancet*, August 2, 1890.

Books and Journals Received.

The First Annual Report of the St. Bartholomew's Hospital and Dispensary, 84 Carmine Street, New York, shows a flourishing condition of this institution, the objects of which are the treatment of skin and venereal diseases and all diseases of the genito-urinary tract, investigations and original research into their aetiology, and investigations into public hygiene connected with this department of medicine and into the prevention of the spread of the contagious diseases belonging to this group.

Report of the Surgeon-General of the Army to the Secretary of War for the Fiscal Year ending June 30, 1889.

Report of the Chief of the Bureau of Medicine and Surgery to the Secretary of the Navy, 1889.

Contribution à l'étude des lésions musculaires dans la sclérodémie. Par le Dr. Georges Thibierges.

Notes pour servir à l'histoire de la kératose pileuse. Par L. Brocq. (Three articles.)

Accidents cérébraux graves consécutifs à la disparition rapide d'un eczéma chronique. Par L. Brocq.

Note pour servir à l'histoire des affections bulleuses. Par le Dr. Brocq.

Note sur les éruptions généralisées rouges. Par le Dr. Brocq.

Contribution à l'étude des vergetures et principalement des vergetures arrondies (macules atrophiques). Par Pellissier Vasilin.

Ana e profilassi della Tigna. Nota del Dott. Ambrogio Bertarelli.

Ueber die Parakeratosen im Allgemeinen und eine neue Form desselben (Parakeratosis Variegata). Von Dr. Unna in Gemeinschaft mit Dr. Santi (Bern) und Dr. Pollitzer (New York).

Die feinere Bau der normalen Lederhaut. Von Dr. Louis Heitzmann.

Die Entwicklungsgeschichte der Lederhaut. Von Dr. Louis Heitzmann.

Zur Kenntniss der multiplen Myome der Haut. Von Dr. J. Jadassohn.

Ueber die Natur der von Zander im Embryonalen Nagel gefundenen Körnerzellen. Von S. Pollitzer, A. M., M. D.

Items.

Alopecia Areata following Influenza.—C. F. Williamson (London Lancet, June 7, 1890) reports the case of a woman aged thirty-five who suffered severely from neuralgia of the supra-orbital and occipital nerves during an attack of the influenza. A recurrence of the trouble two months later was attended by the same neuralgia. Several months later the patient returned still complaining of headache.

An examination revealed loss of hair in patches along the course of the supra-orbital and occipital nerves, and the skin was very tender to the touch. After a few weeks the hair returned over the bald patches.

Ptyalism as the Result of the Vicarious Elimination of Mercury through the Salivary Glands.—Dr. Ludwig Weiss reports (New York Med. Monatschr., April, 1890) the case of a patient suffering from syphilis of the nervous system to whom thirty inunctions of mercurial ointment were given. After the twenty-sixth, ptyalism was noticed. The patient's general condition improved, but, in spite of remedies directed against the local condition, the salivary flow continued by night and day, so that the mouth was continually full and overflowing. Five months after the inunction cure the salivary secretion was profuse.

The secretion of urine was diminished. The saliva secreted in twenty-four hours amounted to 1,000 grammes. Chemical examination revealed mercury in the saliva, but very small amounts only in the urine or faeces.



Dr Taylor's Case of Second Infection with Syphilis

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CLINICAL SYPHILOGRAPHY: A CASE OF SECOND INFECTION WITH SYPHILIS AND A CASE OF SYPHILITIC INFECTION IN A PERSON HEREDITARILY SYPHILITIC.*

By R. W. TAYLOR, M. D.,
Surgeon to Charity Hospital, New York.

IN the year 1885 I had the honor of reading before this association the histories of three cases of syphilitic reinfection, and in April of the year 1883 I exhibited a man before the New York Dermatological Society presenting well-marked evidences of a second infection. I now wish to present the history of a fifth case which is now under my care. It is to be regretted that even at this late day cases are reported as examples of syphilitic reinfection which are only somewhat unusual, sometimes anomalous, instances of a primary infection. In a subsequent paper on this subject I will submit all published cases to a rigid analysis.

As a corollary of this case of reinfection, I will give the history of a case of a person who, having suffered from hereditary syphilis, was afterward the victim of the acquired form of the disease. Not only is this case of much interest in itself, but also in its bearing upon the view held by some that hereditary taint has a greater or less protective influence upon the bearer against future acquired infection.

SECOND INFECTION WITH SYPHILIS.

CASE I.—The patient is a thin, sickly-looking woman, thirty-eight years of age, of English parentage, a seamstress, married, and a person of intelligence. She was never strong and robust, but in early life suffered from no serious diseases. She came to Charity Hospital and was examined by me

* Read before the American Dermatological Association at its fourteenth annual meeting, September 3, 1890.

early in January of this year, and she has remained there since. Her history is as follows:

First Attack of Syphilis.—She states that eleven years ago, while having indiscriminate intercourse with men, she noticed an extensive, hard swelling of her external genitals which caused her much uneasiness and lasted several months. (This was undoubtedly indurating œdema complicating her infecting lesion, concerning which she is uncertain.) Very soon after this swelling of the vulva enlargement of the inguinal ganglia was felt. The woman was uncertain as to exactly how long after the appearance of the vulvar lesion, but stated it as a short time, she observed over her whole body, face, and extremities an eruption of little pimples which did not itch and remained persistently for several weeks. At this time she had intense headaches, which came on at dark and lasted well into the night. For a year she suffered from relapses of her rash on various parts of the body, but it is clear that it showed a tendency to become circumscribed and localized. During this second year of her infection she suffered from severe rheumatoid pains of nocturnal exacerbation, and had mucous patches in the throat. During this time also she suffered with typical syphilitic muscular contraction in the right biceps brachialis, and was for several months unable to extend her arm beyond an angle of ninety degrees. All through the period occupied by these lesions the woman was careless in the matter of treatment, though she had been informed that she had syphilis. In the third year of the disease a serpiginous syphilide appeared on both arms and on the right side of the neck. This eruption ran a slow, rebellious course of about a year, and has left typical scars of large size upon the right side of the neck and much scarring upon the arms and forearms. The extent and appearance of the scars upon the left arm and forearm are shown in a life-like manner in the colored drawing. As a result of this extensive scar, which extends over the flexor surface of the elbow, perfect extension of the arm is impossible. When syphilitic three years, and although in a miserable condition, she married, and as a result gave birth to two weakly, wretched little children, who died shortly after birth. During the ensuing five years in which she lived with her husband she says that she gradually regained her health. After his death she lapsed again in virtue and turned up in Charity Hospital three years ago, and eight years after her first infection with syphilis, with a chaneroid and a virulent bubo. She was promptly cured and discharged. Then she suffered for a time with rheumatic pains.

History of the Second Infection.—Early in the month of January, 1890, I found this woman again in the wards presenting a pitiable appearance. She was thin, emaciated, and weak, and showed a low power of assimilation. She had become broken down by reason of irregularities of life and privation. Over her whole face and neck was a profuse, small, miliary, papular syphilide scattered in discrete form. Throughout the scalp, papules and small pustules were abundant. In the center of the forehead a well-marked incrustated rupial ulcer was prominent. Over the body the miliary syphilide was very copious and conspicuous, existing in its typical corymbiform arrangement, and also as a generalized scattered eruption. Nothing could be more positively diagnostic, for between the papules, fading, slight patches of roseola could be dis-

tinctly seen. Over the arms and forearms the miliary syphilide was copiously scattered, and over the thin, delicate cicatrices left by the serpiginous syphilide of the first infection these papules were placed in great numbers. On the left arm the remains of the hospital vaccination showed an incrustated rupial ulcer. The general appearance of the patient and of her lesions is well shown in the drawing. Over the whole body the ganglia were markedly enlarged. She also suffered from mucous patches of the tongue and mouth, and showed evidences of alopecia. She suffered severely with pains in the larger upper joints and in the knees and feet by day and worse at night. As a result she was confined to her bed, and her cure was no doubt retarded in consequence of want of exercise, fresh air, and sunlight. She was treated by mercurial inunctions and, by reason of the existence of the fibrous tissue lesions, also at times with iodide of potassium. Now, after her eight months' sojourn in the hospital, she is much improved, her digestion is better, her nutrition improved, her weight increased, and her general well-being is far better than when she came in. She has now no active lesions and the pains in her bones and joints cause her very little suffering. She frequently very plaintively says that she did not suffer near as much in her first attack years ago as she has in this, the second infection.

When the woman came into the hospital she was in such a deplorably weak condition that I acquiesced to her entreaties not to examine thoroughly her external genitals; therefore I can not speak of the infecting lesion of the second attack. She knows nothing of a sore on her genitals since the date of her chancreoid, but the inguinal ganglia were typically enlarged, and it is probable, considering her life of promiscuous intercourse, that the post of entry of the syphilitic virus was in the genital tract. It is no uncommon thing for the initial lesion in women to be so small and ephemeral that it escapes the notice of its bearer, and this is probably what occurred in this case. I, like others, constantly see similar instances. While, therefore, there is a hiatus in this case as regards the primary period of incubation of the second attack, nothing is wanting in the picture of the period of secondary manifestations. I certainly have never seen a more clearly marked and typical evolution and course of secondary syphilis. It is interesting to note in this case that the second attack was much more severe than the first. This I have seen several times.

As I have said before, the scrutiny of cases claimed to be instances of second infections with syphilis can not be too rigid, and in these days, when so many putative cases of reinfection are being published, it is necessary to examine them carefully before accepting them.

ACQUIRED SYPHILIS IN A SUBJECT WHO HAD SUFFERED FROM THE
INHERITED DISEASE.

In April of the year 1879 a woman, nineteen years of age, married, and the mother of a three-year-old, seemingly perfectly healthy, girl, came to me

for the treatment of an ulcer on the right side of the nose. This ulcer was quite deep, round in shape, one inch and a half in diameter, and involved the upper lip, cheek, and part of the ala nasi. Its base was covered with a thick, brownish-green crust, and its edges were of a dark-red color, sharply cut, thick, and somewhat everted. The woman, who was accompanied by her husband, a thoroughly healthy man, could not give me any account of her medical history bearing upon hereditary syphilis, and the only suspicious stigmata about her were a few faint cicatricial lines at the angles of the mouth. She also complained of coryza of a slight muco-purulent character without fœtor, and she stated that the discharge from the nose had irritated her upper lip and caused a red pimple to appear, which she had picked and from which the ulcer developed. There was no perceptible adenopathy over the whole body. Being convinced that the woman presented evidences of hereditary syphilis, mixed treatment and a mild carbolized mercurial ointment were ordered. Local treatment for the nose was also directed. At the end of two months the ulcer had completely healed, but, owing to the great destruction of tissue, the lower part of the right ala nasi for an inch from the cheek was puckered and cicatrized, and the portion of ulcer on the cheek and lip had also resolved into a firm cicatrix. The result was that the ala nasi was drawn down until it lay upon the septum, and that the tip of the nose was turned toward the right cheek. The picture was typical of syphilitic destruction of these parts. I then lost sight of the case for six months, during which the woman, contrary to orders, omitted treatment, general and local. She then returned with her mother, who gave a clear history of syphilis in her husband, long since dead, and in herself. She had had three miscarriages at early months before the birth of our patient. The latter had a rash, condylomata lata, and snuffles for nearly a year after its birth, and had been a miserable, puny child until it reached six years of age. Two children, born, respectively, two and three years after the patient, had lived and enjoyed good health. By means of active internal and local treatment the nasal affection was cured in five months with only the loss of a small plate of bone and with no further deformity. During the period of existence of the nasal trouble the woman suffered from marked debility and was thin and cachectic. In the course of the year she recovered completely and became strong, healthy, and plump.

In the fall of 1885, about five years after her recovery from the lesions of hereditary syphilis, and in her twenty-sixth year, this woman came again under my observation. At this time she was covered from head to foot with a macular roseola and a flat, scaling syphilide. Her external genitals were the seat of much hypertrophied condylomata lata, and her pharynx was the seat of mucous patches. This syphilitic infection was contracted from her husband and began in an indurated nodule on the right labium minus, which was present at the time of examination, and was complicated with much indurating œdema. The ganglia over the whole body were typically enlarged, there was marked alopecia, and a dry onychia of some severity served to complicate the case unfavorably.

The woman was cured and is now well and hearty and the mother of a child two years old, lively, strong, and unblemished.

This very interesting history clearly shows that at nineteen years of age hereditary syphilis broke out in a patient who, in early days, had received very little treatment. The wonder is that she presented such a good appearance at puberty and during her first pregnancy. It would be interesting to know what effect acquired syphilitic infection would have had on her, especially during the period of the existence of her late hereditary manifestations, and also during childhood and puberty. Certain it is, however, that in her twenty-sixth year she became infected with the acquired disease, and that the latter developed in her system in a most active form. Now, the interesting question suggests itself: Did the prolonged mercurial course instituted for the cure of her hereditary disease so profoundly modify her system that she lost her immunity again and thus became the victim of acquired syphilis? This, of course, can not be answered, and all carefully observed and well-recorded cases bearing upon this subject will have an especial interest.

Cases of hereditary syphilis in which the subject becomes early or late the victim of the acquired disease are very rare, and the histories of all the published cases are unsatisfactory and even faulty. In the course of my reading I have found the following: W. Boeck * mentions the case of a child, the victim of hereditary syphilis, whom he treated in its first year by means of syphilization, and who returned when he was eighteen years old with the acquired disease.

Hutchinson † reports two cases in which young men of well-characterized heredito-syphilitic physiognomy had chancres which became inflamed and were followed by a "rupia rash." With all due respect for that eminent surgeon, I am unable from his descriptions to convince myself that either of those two unfortunates presented satisfactory evidence of a late acquired infection.

Lang ‡ mentions the case of a man, twenty-five years old, who had suffered until his eighteenth or twentieth year with a severe form of hereditary syphilis, who came to him with a typical hard chancre and swelling of the inguinal ganglia. The further history is not given.

Dowse # reports the case of a girl, nine years old, whose mother had had eight miscarriages, and whose upper central incisors were notched and irregular, but yet who gave no history of congenital syphilis. This girl was infected with syphilis from the condylomata lata of a neighbor's child, and had generalized syphilides and lesions of the alae nasi, pharynx, larynx, trachea, and bronchi. She died of the disease.

* *Undersogelser angaaende Syphilis.* Christiania, 1875, p. 270.

† *New Facts and Opinions as to Inherited Syphilis.* London Hospital Reports, 1865, pp. 169 and 170.

‡ *Vorlesungen über Pathologie und Therapie der Syphilis.* Wiesbaden, 1884 and 1886, p. 458.

Medical Times and Gazette, June 9, 1877, p. 630.

It will thus be seen that upon the subject of the condition of the tissues of a patient hereditarily syphilitic in its relations to subsequent acquired infection we have at present really very little knowledge. How long and to what extent an inherited taint may confer an immunity to acquired syphilis we are unable to positively say. The facts derived from present and future observations will, I venture to predict, very probably go to prove that while the hereditary diathesis is yet active, an immunity perhaps only partial to the acquired disease may exist, and that as this grows progressively weaker and the inherited taint dies out, the immunity grows less and less and is finally lost. Then acquired syphilis may be contracted.

CASES OF CUTANEOUS TUBERCULOSIS, WITH HISTOLOGICAL STUDIES.*

By JOHN T. BOWEN, M. D.,

Assistant for Diseases of the Skin, Massachusetts General Hospital.

CASES of cutaneous tuberculosis have been frequently reported where the microscope detected the specific bacillus, although the clinical appearances were not distinctive of any recognized form of this disease. On looking over the literature, one finds many cases where little attempt at clinical description is made, the writers contenting themselves with the statement that a nodule, or other appearance, was observed, and, suspicion having been aroused by some peculiar circumstance, an examination with the microscope has revealed the efficient cause. In point of fact, the time, it seems to me, has not yet come for a thorough classification of the various forms. We need more data, more carefully recorded observations, more microscopical examinations studied in connection with the clinical phenomena, before we can determine how many of the cutaneous lesions formerly regarded as doubtful or put under other headings belong in this class. *Per contra*, one may not be accused of too great a skepticism if the question be raised whether, as always happens when much new light is suddenly thrown upon a subject, we are not inclined to embrace in this class cases where the evidence of their tubercular nature is insufficient. Therefore the cases that I shall report are presented in the light of studies, with the hope that they may represent some slight contribution to the subject. Those cases in which the bacillus was not looked for, or was looked for in vain, were classed under this head only after careful study and after an elimination of all other affections had been made. The cases were all observed at the skin depart-

* Part of a paper read at the fourteenth annual meeting of the American Dermatological Association, at Richfield Springs, New York.

ment of the Massachusetts General Hospital, and it is to the courtesy of Dr. J. C. White that I am indebted for permission to obtain the material for microscopical study in several of them, and to report them in this connection.

Apart from lupus and the deeper seated lesions of so-called scrofuloderma, two forms of cutaneous tuberculosis have been accurately described and pretty generally accepted—viz., the rare military form, situated, as a rule, at the outlet of the mucous cavities and associated with serious internal lesions, and the tuberculosis verrucosa cutis of Riehl and Paltauf.

Tuberculosis verrucosa cutis is now so well recognized that only a brief description for the sake of completeness is necessary. This affection, to which attention was called in 1886, is characterized by plaques situated chiefly on the backs of the hands, arms, and fingers, looking at first sight like a cluster of inflamed warts. These patches are rounded or more or less oval in shape, occasionally assuming serpiginous forms by confluence. In typical cases there is seen at the borders of the plaques an erythematous ring, within this a row of small superficial pustules, situated on a slightly infiltrated base, while the prominent center is occupied by a warty outgrowth covered with crusts and horny epidermis, and between the papillary outgrowths are erosions and pustules. The affection occurred chiefly in persons of adult age, in good health, who were brought into contact, from their occupation, with animals or animal products. The brown-red nodules so typical of lupus are not seen in this form. The verruca necrogenica, so often found on the hands of those working in dissecting-rooms or at the autopsy-table, is nearly, if not quite, identical.

I.

Cases of Typical Tuberculosis Verrucosa Cutis Riehl.

CASE I.—W. D., male, aged twenty-four, June 8, 1889. The lesion, which corresponds with the well-known appearances of tuberculosis verrucosa cutis in every particular, is situated on the back of the hand over the metacarpals. The patch appeared first five years ago, while the patient was employed in the care of cattle on board a transatlantic cattle ship. It has never disappeared, but has increased very slowly.

This case is reported simply on account of the probable mode of infection, it being the second case observed by the writer where men employed on cattle ships were affected. It would not be surprising if it were found to be a pretty common affection in men of this class, as no better opportunity for inoculation can be conceived of than that offered by this occupation.

CASE II.—H. B., female, aged sixty-five, June 16, 1890. Patient presents a circumscribed, bluish-red, warty growth, with purulent foci, on the back of the last phalanx of the index finger—a typical Riehl. Over the

metacarpals of the same hand a diffuse, soft, bluish-red infiltration, extending pretty deeply into the subcutaneous tissues—a so-called scrofuloderma or gomme scrofulense. The warty patch first described made its appearance three years ago, while the patient was nursing a daughter ill with phthisis, who subsequently died. The woman is otherwise healthy, large, and stout. No marked glandular enlargements.

CASE III.—J. Y., female, aged fifty-eight. All her family died of phthisis. On the back of the finger of the right hand a typical tuberculosis verrucosa cutis. This appeared about two years ago, at the time of the death of a daughter who had been ill with phthisis, and whose soiled handkerchiefs and clothing she had been in the habit of washing.

Cases II and III are interesting from their similarity. In each a middle-aged woman presents on the back of the finger a patch of tuberculosis verrucosa cutis, and in each case the time of its appearance coincides with the period when the patient was taking care of a phthisical daughter. In Case II a further point of interest is the subsequent appearance of a gomme scrofulense on the back of the hand, an association that has, it is true, been noted before.

II.

Cases of Cutaneous Tuberculosis in Young Subjects, consisting of sharply raised, reddish-blue Nodules, sometimes Confluent, usually, but not always, with a Warty Surface, resembling Tuberculosis Verrucosa Cutis Richl, situated chiefly on the Backs of the Hands, Elbows, and Knees.

CASE IV.—K. G., female, aged sixteen, July 17, 1889; born in England. No record of phthisis in any member of the family can be discovered. Patient has not been with any consumptive subject. General health and appearance good. Two years ago, while working in a spinning-mill in Lancashire, she bruised her elbow against one of the machines. The present trouble then made its appearance, at first in the form of a small tubercle, and it has steadily increased in size. She now presents on the right elbow a patch of the size of a large silver dollar, slightly raised above the level of the normal skin, yielding and soft to the touch. The upper part of the patch is made up of a diffuse infiltration, which is shown by the touch to lie in the subepidermal structures, while the epidermis over it is thickened and of a slightly warty appearance. In the lower portion are several detached nodules the size of a pea, without warty change or epidermal thickening, resembling much a large papule of syphilis, but differing from it in that they are softer and less resistant to the touch. There is some atrophy of the skin between these tubercles. The color of the patch is a bluish red. The plaques were treated with mercurial plaster, worn continuously. Under this treatment they diminished in thickness, and there was a gradual improvement taking place when the patient was lost sight of about two months later.

Histological Examination.—A small piece was excised and hardened in alcohol. Sections made through the whole piece after imbedding in

celloidine gave the following picture: The stratum corneum thickened, but not, in the piece examined, showing any warty prolongations. There is, however, a marked epithelial proliferation, the rete sending deep prolongations into the corium, whose papillae are elongated. In the upper portions of the corium, directly beneath the rete, are seen enlarged vessels and lacunae in the connective tissue, together with a fine-celled infiltration. In this papillary layer there are seen clusters of large and small Langhans giant cells, with peripheral nuclei and necrotic center, and interspersed between them epithelioid and round cells. At the border of the clusters the round cells are found in dense masses. The giant cells were found in great numbers in each section examined. The lower layers of the corium appear normal. Sections were stained by Ehrlich's method for the tubercle bacillus and examined with much care. None could be detected in the first thirteen sections examined. In the fourteenth, two bacilli were found, one at the periphery of a Langhans cell, and further search revealed others very sparingly disseminated.

CASE V.—F. C., male, aged seven years, September 21, 1889. Was well until seven months ago, when he had what was called pneumonia. Soon

afterward he began to have trouble over the wrist of one hand, which now presents a typical scrofuloderma. A short time after the trouble with the wrist began there appeared lesions of the skin of the knee and elbow. He now has, in addition to the scrofulous affection of the wrist, several sharply raised circular patches on the left knee and left elbow, which are found to consist of a soft sub-epidermal infiltration, covered by a thickened scaling epidermis, with some small papillomatous projections, which



FIG. 1.

give a slightly warty appearance to the nodule. These nodules average half an inch in diameter and have a deep-reddish color.

Microscopical Examination of Piece excised.—Stratum corneum thickened. The rete everywhere prolonged into the corium and branched in

various directions. No marked corneal projections, but in places where the rete plugs have proliferated deeply the stratum corneum seen to dip well down into these prolongations. Eleidine zone increased in thickness. Papillae elongated, vessels dilated. A moderate round-celled infiltration seen, as a rule, in the papillae. In the papillary layer of the corium, just beneath the rete prolongations, are clusters of round cells inclosing larger epithelioid and an occasional large Langhans giant cell. The Langhans cells are not seen in every section, it being necessary sometimes to search through a number of specimens before they are found. In several of the foci, besides the epithelioid and giant cells, there is seen a collection of deeply stained granula, and the cell contours are not quite so sharply defined as usual.

Sections were stained for the tubercle bacillus by Ehrlich's method. None were detected in the fourteen sections examined, when the search had to be abandoned from lack of material.

CASE VI.—A. C., female, aged six years, September 21, 1889, sister of F. C. (Case V). The children slept together at the time the tubercular joint affection occurred in the brother. As far as the mother can remember, the present lesions appeared at the same time that the warty nodules were observed on the boy—*i. e.*, five or six months ago. The appearances in this case are precisely similar to those in Case V, with the exception that the nodules are somewhat smaller. On elbows and knees appear these same reddish-blue, sharply raised, papillomatous nodules, without trace of ulceration or suppuration, yielding to the touch; not painful. The child is otherwise apparently healthy. No microscopical examination of this case could be made.

These two children were not seen again until August, 1890. The patch of serofuloderma on F. C.'s wrist had healed, leaving a characteristic scar. Of the warty plaques, several had disappeared entirely, leaving a smooth, superficial cicatrix. All were less prominent, and no new ones had appeared. The treatment, which was the application of a five-per-cent. white precipitate ointment and a mild salicylic-acid ointment, had been kept up for a short time only.

The plaques on the skin of A. C. (Case VI) had also in part disappeared, leaving a slight depression and atrophy. The child had lost much flesh and strength, and had a distressing cough. Physical examination showed well-marked lesions at the right apex.

CASE VII.—J. M., female, aged nineteen months, October 8, 1889. Uncertainty as to when the affection began. Mother thinks there have been some lesions for five or six months, but is not sure. Was always a delicate child. Mother's sister-in-law was in the house ill with consumption for three months, and died one month ago. Child has had a cough for some time. Present state: on the backs of the fingers of both hands are bluish-red, papular lesions the size of a large pea; raised, slightly warty on the surface

in some instances, in others smooth. On the thighs, papules of about the same size, not warty, soft to the touch, bluish-red in color, not fading on pressure. No history of syphilis.

Histological Examination.—The stratum corneum thickened as in the other cases, in one or two places dipping down deeply into the epithelial plugs. The eleidine layer is increased in thickness. The rete has pushed itself deeply down into the corium in the area of the nodule, and the papillae are much elongated. There is no more inflammatory small-celled infiltration than one sees in the vicinity of any chronic process. Imme-

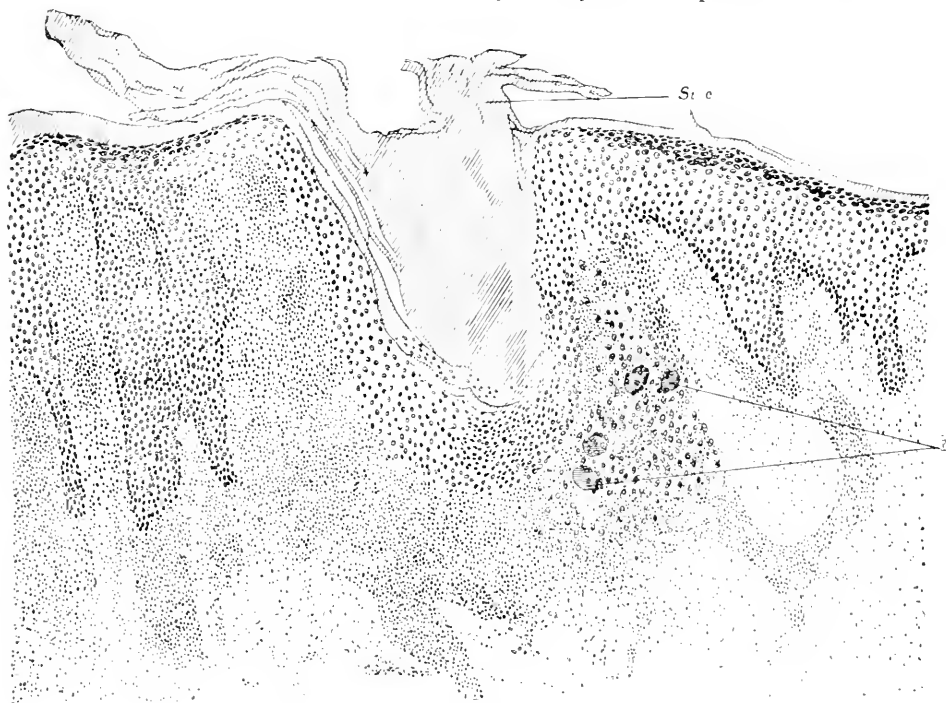


FIG. 2.

St. c., Horny plug of thickened stratum corneum; *L.*, Langhans giant cells.

diately under the rete, especially in places where the horny plugs extend downward into the corium, are clusters of round, epithelioid, and Langhans giant cells. The giant cells are pretty numerous, being seen in every section examined. In the papule examined the sweat glands seem unusually prominent and numerous, but not abnormally changed. The foci of epithelial and round cells lie in the very highest layers of the corium, in the papillae themselves.

On staining by Ehrlich's method, the tubercle bacillus was found in the sixth section examined, a result that was verified by further search.

Cases IV, V, VI, and VII presented, clinically, the same appearances. The papillomatous element in all was very slight, and often wanting. They may be described as sharply rounded, reddish-blue nodules, consisting of an infiltration of the subepidermal tissue, soft to the touch, with, in many cases, the addition of a papillomatous condition of the surface. They differ from a large papule of syphilis in the feel—they are so much less resistant to pressure. The color, also a bluish-red, may be considered as somewhat characteristic, as it resembles that seen in the deeper-seated lesions of *scrofuloderma*. They may, as illustrated by Case IV, become confluent and form larger patches. As will be seen, they resemble the *tuberculosis verrucosa cutis* of Riehl, and it is in this class they should be placed. They differ from Riehl's description in that they have occurred in those cases that I have observed chiefly in young subjects, in the absence of purulent foci, and in their less marked warty character.

Turning now to the histological characteristics, we have an increase in the thickness of the horny layer, a proliferation of the rete into the corium, an elongation of the papillae, which contain dilated vessels and a moderate infiltration of round cells, and, as the most prominent feature, clusters of epithelioid, lymphoid, and Langhans cells in the upper part of the corium, immediately below the rete. The number of tubercle bacilli found was very small, requiring protracted search, and resembling in this respect those found in true lupus, where one has often to examine a long series of sections before finding a single example of this micro-organism. The small abscesses found in *tuberculosis verrucosa cutis* were not seen in the sections I have examined, nor was there any sign of cheesy degeneration in the center of the foci of epithelial and giant cells. They resemble histologically Riehl's description of the youngest part of the plaques of *tuberculosis verrucosa cutis*, which represents the early stage of the tubercular process, before the papillomatous character has become marked. In those cases that I have examined they differ from Riehl's cases in the paucity of bacilli also.

A number of other cases were also observed, which offered the same appearances to the eye and were believed to belong to the same class, although no careful study was made. In some of them the association with a *gomme serofuleuse* could be verified.

The clinical features of this form have, it seems to me, been pretty accurately described by Dr. McCall Anderson in 1868, under the name of *lupus verrucosus*, or *scrofuloderma verrucosum*.* According to his description, *lupus verrucosus* always occurs in "strumous" subjects, and exhibits generally a warty formation on its surface. It begins by the development of small, circumscribed, dusky-red or violet patches, often in the form of tubercles about the size of a split pea or bean. Sometimes these

* Journal of Cut. Med. and Dis. of the Skin, London, 1868.

are isolated, oftener confluent, so as to form patches of irregular outline and of variable size. They may subside without undergoing a further development, or may advance to suppuration, but in the majority of instances they become covered with wart-like excrescences, and then these violet-colored warty patches present an appearance that once seen can never be mistaken or forgotten. The warty formation can be readily picked off, but a new excrescence gradually grows in its place. The patches beneath the excrescences are *not ulcerated*, but the papillæ are hypertrophied. Its course is chronic. As the general health improves, either from natural causes or from the influence of treatment, the warty excrescences fall off, the patches become less elevated, and finally a white cicatrix is left. This form is met with among half-starved and neglected children. It occurs usually on the extremities, especially on and in the neighborhood of the hands and feet. He further says: "I have been led to understand that similar appearances to the above have been not uncommonly observed in Paris on the hands of medical students, and that, from a supposed connection between the eruptions and the poison emanating from the dead bodies in the dissecting-rooms, the term *tuberculum anatomicum* has been applied to it." It is of comparatively rare occurrence, for among 5,114 cases of skin disease it occurred but nine times. The prognosis is favorable, and it is not so slow in disappearing as is *lupus vulgaris*.

Under the title of *lupus scléreux*, Vidal * has published a description of an affection which he considers to be a form of *lupus*, and regards as the same as McCall Anderson's *lupus verrucosus* and the *lupus papillaris, verrucosus* of Kaposi.

He describes two forms, a primitive and a secondary form. The latter is the more frequent and is produced from a tubercular *lupus* when the latter assumes a papillomatous character. The primitive form appears as reddish patches, which increase in size and take on a verrucous, papillomatous character, with fissures and ulcerations. Pus may often be pressed from the deeper portions. A cicatrix forms in the center of the patch, which progresses toward the periphery, following the *lupus* tissue in its serpiginous spread. Exceptionally the patches may heal spontaneously. Its seats of predilection are the extremities, hands, and feet, and it occurs on the face.

The histological investigations of Leloir and Vidal showed a papillomatous condition, with epithelial proliferation, and a fibrous transformation which affects at first the periphery of a primitive nodule, then penetrates into it, and divides it by the prolongations of fibrous tissue. The sclerosis continues, and finally the whole nodule is transformed into fibrous tissue.

Clinically there are points of similarity, as will be seen, between this

* *Annales de dermat. et de syph.*, Paris, 1883, p. 414.

primitive form of Vidal's lupus scléreux and McCall Anderson's lupus verrucosus, as well as with the cases reported by the writer. As to the secondary form, that certainly can not be confounded with McCall Anderson's affection. Anderson expressly says: "In some cases of lupus exedens (or lupus vulgaris in the stage of ulceration) we observe a warty formation developed from the drying up of the ulcerations. This is the scrofulide verrugueuse of Hardy, is only a secondary formation, has no claim to a separate name, and is quite distinct from the disease in question." From this it is plainly seen that Anderson recognized the papillary hypertrophy that lupus ulcers (in common with those of other pathological conditions) may take on, and to which Kaposi has given the name lupus papillaris, verrucosus; and he distinctly states that *his* lupus verrucosus is not to be confounded with this form, as there is an absence of ulceration in all his cases. As to the fibrous transformation that occurs in lupus scléreux, it was not at least prominent in the cases above reported, nor is it mentioned by Riehl.

It seems to me, therefore, that the cases I have reported represent the affection described by McCall Anderson as lupus verrucosus. In the light, however, of later work, I think their place is with the tuberculosis verrucosa of Riehl, and that the lesions represent the result of a local inoculation of tuberculosis on the skin of (usually) young subjects. Anderson, it will be remembered, speaks of the similarity of his lupus verrucosus to the verruca necrogenica, which is now considered to be a verrucous tuberculosis from local inoculation; and I find that Dr. P. A. Morrow, in a paper entitled Tuberculosis Papillomatosa Cutis,* refers to the resemblance between the description of McCall Anderson's lupus verrucosus and Riehl's tuberculosis verrucosa cutis.

I do not consider the cases I have collected sufficiently numerous to compile from them an exact description of the appearances of this variety. A larger experience may show that in some instances they assume the character of a typical tuberculosis verrucosa Riehl, or that forms more nearly resembling true lupus may occur. While the small pieces that I have been able to examine showed some histological variations, the main features accord with Riehl's, in that we find a papillary hypertrophy with proliferation of the rete, not preceded by ulceration, together with nodules of granulation tissue, of the type of tubercle, situated in the upper part of the corium directly beneath the rete.

In their clinical appearances also these cases bear a marked resemblance to those of Riehl and to the verruca necrogenica, or anatomical wart which is identical with tuberculosis verrucosa cutis.

As to the mode of infection, McCall Anderson's cases occurred commonly in strumous children. Of those that I have reported, in one

* Journal of Cutaneous and Genito-Urinary Diseases, October, 1888.

there was a history of a bruise, which, it must be assumed, was in some way infected with tuberculous virus. In the case of the brother and sister there was associated a scrofuloderma and probable tubercular affection of the joint in the boy, and the girl exhibited soon afterward a rapidly progressing tuberculosis of the lungs. The two children had slept together at the time the boy's wrist was in a state of open ulceration, and shortly afterward the verrucous lesions had appeared upon both. In Case VII there had been a consumptive patient living in the same room at the time of the appearance of the affection of the skin.

[Since writing this article the author has noticed in the Bulletin de la société française de dermatologie et de syphiligraphie the report of two cases of cutaneous tuberculosis in children shown to the society by M. Sevestre, April 11, 1890.

M. Sevestre considers that they are examples of the verrucous tuberculosis of Riehl, and M. Besnier prefers to classify them under the head of scrofulo-tuberculose.]

PEMPHIGUS CIRCINATUS.

By CHARLES W. ALLEN, M. D.,
Surgeon to Charity Hospital, etc.

RISKING the misfortune of being classed with those others who "rush in" with one "where angels fear to tread" with whole series of cases, I beg to give the history of a single instance of pemphigus recently observed. This is not a common disease in New York, and for this reason, on two former occasions, I have described isolated cases in this Journal: Pemphigus Acutus seu Febrilis, April, 1888, and Dermatitis Multiformis Gestationis (Pemphigus Gestationis), August, 1889. I again crave the indulgence of the reader.

CASE.—Mrs. A. J., native of Wales, forty-five years old and a widow, was admitted to my service in Charity Hospital on January 20, 1890. Her father had died of epilepsy and her mother and a brother of dropsy. There had never been any skin diseases in the family. Patient herself had always been well and free from any affections of the skin. She has had no recent illness and has taken no drugs of any kind. Four days before she entered the hospital patient noticed a soreness of the throat, and received for it a gargle at a dispensary to which she applied. The following day patient says her tongue and lips began to swell and the face to become puffy, especially about the eyes. The gargle was discontinued on account of the pain it occasioned.

The next day, and that before her admission, patient noticed a small "water blister" on her right wrist; there was some itching, and the bulla was soon ruptured from scratching; patient experienced considerable malaise, though the symptoms were not well defined and she could not give a good account of her feelings. A similar bulla soon appeared upon the opposite

wrist, and from that time on they continued to crop out on various parts of the body until there were present, when I first saw her, numerous flat bullæ ranging in size from the diameter of a large pea to that of a silver dollar, rising from an erythematous base, with here and there large, isolated, frank bullæ, tensely distended with serum, arising from non-erythematous portions of the integument and not presenting any surrounding zone of redness. These lesions were scattered more or less symmetrically over the face, neck, trunk, and extremities, especially the upper. Such bullæ continued to appear during the next few days, and some of those which had been first observed began to dry in the center while they spread at the periphery, raising up the epidermis in their extension. Numerous lesions upon the back have coalesced, and the thin walls of the ruptured bullæ, having been rubbed away, leave excoriated surfaces exposed, the central part of which soon dries and becomes covered with fine scales. The hyperæmia of these spots can be momentarily removed by finger pressure.

Patient was vaccinated upon entering the hospital, and a few days later a tense bulla developed at the site of vaccination. It had no surrounding zone of erythema. Such isolated, tense, frank bullæ, without erythema, soon rupture, and the walls dry and desquamate, while those having a surrounding margin of reddened skin enlarge by an undermining of the tissues with serum, or by the formation of a ring of contiguous, and in some instances confluent, bullæ smaller than the central parent. In a number of these circinate groups the central tense bulla ruptures only after the surrounding ring has been formed; the central portion then soon dries and becomes somewhat scaly and of a bluish or violaceous hue, while the fluid in the peripheral chain of flatter lesions is reabsorbed, and the border of the patch may become covered with a crust. Upon the inner surfaces of the thighs, in the groins, and extending upon the abdomen above the pubic region and including the external genitals, the lesions lose their bullous character early, and, by coalition of the separate elements, form extensive denuded patches more or less crusted over, and presenting much the aspect seen in Kaposi's pictures of impetigo herpetiformis, plates 8 to 10, *Vierteljahresschrift für Dermat. und Syphilis*, 1887.

The lower portion of the back and buttocks is likewise denuded, covering an area of eight by ten inches. Even these extensive patches are not very painful. In some places a chain of vesicles or small bullæ (for the most part the latter) form at the margin of quite an extensive patch, and give to it a more or less festooned border.

Treatment consisted in the administration of Fowler's solution of arsenic, beginning with three drops and gradually increasing the dose one drop each day. Externally the affected areas were dressed with a zinc-and-starch paste, to each ounce of which a drachm of compound tincture of benzoin was added.

January 30th.—Patient's condition has remained about the same; there has been a slight elevation of temperature of irregular course. Bullæ have continued to appear on previously unaffected parts, the size not averaging above that of a large filbert. Many of the groups have assumed a cyanotic center, and in several instances a veritable herpes-iris-like appearance is presented, a double circle of bullæ having formed and the skin between the cir-

cles having the same cyanotic hue as the central part. Here and there a tense bulla is still to be seen encircled by a distinct ring of smaller ones, suggesting a brooch with a central gem surrounded by pearls. The regions of the genitals and groins, which were previously denuded, bleeding, and somewhat painful, are now dry and scaly and free from new formation of bullous lesions. There is now some pruritus present in these parts for the first time. Appetite is good, tongue not coated, bowels regular, pulse soft and regular. Patient has now reached a dose of twelve drops of the arsenical solution three times daily, and slight nausea is complained of.

31st.—Pulse has become irregularly intermittent, losing a beat out of six, thirteen, and twenty-six pulsations, and then becoming regular for a hundred or more beats, and so on. Examination of the urine shows a small percentage of albumin. Upon the cheeks, surrounding both eyes, are circles of small bullæ upon an erythematous base. The skin of the eyelids themselves is free, but just at the ciliary margin are to be seen small vesicles, singly or in a chain. Surrounding the areola of the left nipple is a circle of bullæ of recent origin. There are new bullous lesions scattered over all the red-den patches on the back (corresponding to the locations of a previous crop which had entirely disappeared). Upon the right chest wall there is a new group of small papulo-vesicles, and here and there upon the back is a flattened papular lesion, presenting as yet no indication of vesiculation.

Patches which were yesterday dry and desquamating, upon the lower lumbar region, are now again sparsely covered with small bullæ. Both sides of the neck are now covered with lesions whose contents have become turbid and yellow, and the parts are somewhat painful. The reaction of the fluid in the bullæ is alkaline.

Compound tincture of benzoin applied to the region of the neck had appeared to hasten the healing process.

February 2d.—A few pea-sized bullæ have sprung up over the abdomen and thighs, the walls of which quickly flatten and dry, and the lesions which have appeared as a second crop over the old patches upon the back likewise dry up quickly.

7th.—Mucous membrane of mouth and tongue is quite sore and painful; the tongue is fissured and red, but no bullæ are to be found. Temperature 100.2° F.

Arsenic stopped and a half-per-cent. solution of potassium permanganate given as a mouth wash.

10th.—New bullæ still form on the old patches, and some patches are still enlarging by the development of fresh lesions at the periphery. Upon the legs and thighs are seen patches made up of several concentric rings, the center in some instances being a dried blood crust. The mucous lining of the mouth is improved, but upon the mucous surface of both lips are several isolated small bullæ. The patches on the upper parts of both arms are now covered with dirty-yellow crusts like those of an impetiginous eczema.

14th.—The patches upon the back and buttocks are now smooth and deeply pigmented.

16th.—Fowler's solution begun again to-day in doses of six drops, to be gradually decreased to three, and then run up to twelve.

18th.—Fresh lesions about the borders of patches on legs and thighs, and some blood crusts.

26th.—Patient's legs are œdematous from knees to feet, and backs of hands are puffed up.

Examination of heart discloses an aortic obstructive as well as a mitral regurgitant murmur. Examination of urine shows five per cent. of albumin with hyaline and granular casts. Ordered ten minims of the tincture of digitalis three times a day, and an equal dose of the muriated tincture of iron. Arsenic to be stopped. Oleum lini to be applied to all irritated surfaces.

27th.—Puffiness gone from hands.

March 9th.—Left ankle still œdematous; small vesicles and vesico-pustules are present on site of some former lesions. Region of left eye œdematous and inflamed; some conjunctivitis. Pulse weak, irregular; heart murmurs still present. Albumin and casts still in urine. Considerable pruritus of surface.

13th.—Edema has entirely disappeared and mitral murmur is much less audible.

Patient discharged. Entirely free from eruption. Location of all patches plainly marked by areas of dark-brown pigmentation. Heart murmurs scarcely to be detected. Patient feels well, but promises to report if any recurrence takes place.

May 2d.—True to her promise, Mrs. J. presented herself again to-day at the hospital with the statement that after a week's absence new bullæ began to form upon the arms and thighs, the first appearing upon the right arm and subsequently upon the left, just as had taken place in the very onset of the disease. All of the lesions have developed upon parts previously affected. Fowler's solution was begun in the same increasing doses as before.

5th.—Conjunctivitis of both eyes.

12th.—Nourishing diet, wine, plenty of sunlight, and exercise in open air.

25th.—Discharged very much improved. Entirely free from eruption. Pigmentation marked.

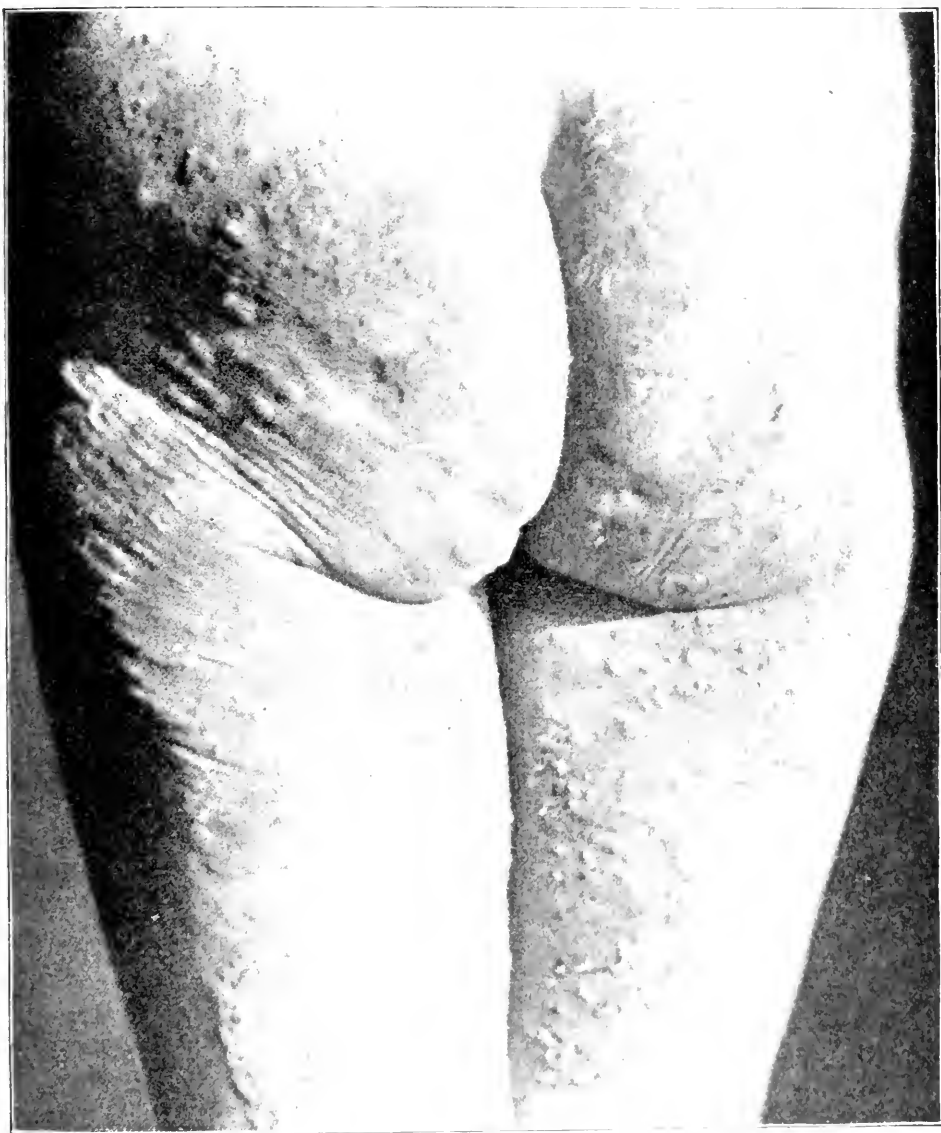
June 30th.—Patient readmitted. She states that she had remained well until three days ago, when bullæ were noticed upon the region of the right knee and left arm and were preceded by a redness of the skin. The whole of the left forearm is now occupied by a circle of excoriations (resulting from vesicles and bullæ early ruptured), and the upper arm presents a circle of scales and crusts corresponding to an older outbreak. This early rupture of the lesions, or the apparent formation of circles of excoriations primarily, is characteristic of the present stage of the process. Crusting and healing quickly follow, and the red patches left behind soon become dark from pigment deposit. Treatment consisted in painting the affected areas with two and a half grains of resorcin in an ounce of collodion, and the administration of Fowler's solution in three-drop doses thrice daily.

September 1st.—Surface now quite free from eruption.

15th.—Discharged cured.

During patient's last stay in hospital she was under the care of my friend and colleague, Dr. Bronson, who made the diagnosis of dermatitis

herpetiformis, and I have no doubt Dr. Dahring would have supported him in it had he seen the case in this declining stage, with few scattered



vesicular and bullous lesions, pigmentations, crusts, scales, excoriations, pruritus, etc. To one, however, who had watched the case from its beginning and kept in mind the preponderance of large bullae and a clinical

course following the descriptions of pemphigus given by authors, there appears no occasion for the newer designation. I am free to admit that, according to Dr. Duhring's descriptions, this case could readily be included in his dermatitis herpetiformis, but this, I think, is only because his group has been made so comprehensive as to embrace instances of this as well as other forms of pemphigus.

In this case, as in others which I have treated with arsenic, the drug has appeared to exercise a very beneficial influence, and I do not hesitate to attribute to it decided curative powers in these bullous and vesicular affections.

In the accompanying illustration the lesions upon the thigh give a fairly good idea of the predominant circinate arrangement, which in some instances was very striking. Whether the patient will remain free from eruption is a question. She has promised to return to the hospital at once in case of a relapse. An interesting question is that of the visceral lesions. Did the disease of the heart and kidneys precede the skin affection and act as an aetiological element, escaping detection until the pemphigus was well established, when they became suddenly aggravated, or were they the result of the extensive implication of the skin with its attendant disturbance of the general system? The scope of this paper and the space allotted me will necessitate a subsequent consideration, if any, of this interesting feature of the case. I will simply say here that in several bullous drug eruptions which have come under my observation there have been diseases of the heart and kidneys, and it has appeared to me that they held a decided causal relationship to the eruption by preventing the proper elimination of the drug. In this case, while the proper eliminative function of the kidneys may have been interfered with to such an extent as to have an influence upon the eruption, the sudden and marked onset of kidney and heart symptoms two weeks after the pemphigus appeared, and the decided improvement in these symptoms coincident with the healing of the skin, do not speak strongly in favor of this as the sole aetiological factor.

696 MADISON AVENUE.

DISEASES OF THE NAILS.

By JOHN V. SHOEMAKER, A. M., M. D.,
Philadelphia, Pa.

(Concluded from page 425.)

PSORIASIS.—According to Dr. Deligny, psoriasis has been oftener observed and better described than eczema of the nails. By some authors the two maladies have been confused, since the local alterations are not dissimilar. The coexistence of cutaneous eczema or psoriasis

is a diagnostic point of importance. Very rarely does psoriasis limit its attack to the nails, but patches of it may almost invariably be detected upon some portion of the integument. In a doubtful case a history of preceding attacks of eczema would point to the nature of the disease. M. Humbert * endeavors to arrive at a differential diagnosis by stating that in eczema the thickening is considerable, the epidermic production at the expense of the bed of the nail, and begins toward the free edge, from which it extends backward to invade all the subungual derm. In psoriasis, on the contrary, there is generally thinning of the nail, a dotted appearance of its surface, and the affection begins on a level with the lunula to attack the nail progressively as it develops. But the dotted aspect is not peculiar to psoriasis, and may be found in eczema. In some cases of eczema, likewise, the nail is thinned; and, finally, eczema does not always begin near the free border. Vidal teaches that in psoriasis the striation is transverse, while it is longitudinal in eczema.

Mr. Jonathan Hutchinson † divides psoriasis of the nail into four varieties, as follows: (1) in which it is associated with the same disease in the skin; (2), is without psoriasis of the skin present, but with probably a predisposition to it; (3) from an inherited taint of syphilis; (4) from an acquired taint of syphilis.

A case of psoriasis of the nail has been recently described by the same acute observer.‡ A surgeon had psoriasis of the elbows and knees eighteen years previously. It was never severe, but had often relapsed. It had almost entirely disappeared during the last six years. The finger nails began to suffer a few years after the psoriasis first appeared. In the first instance, an inflammation of the nail-bed always appeared at the edge of the nail, either at its side or its extremity, never at the root. The nail was not thickened. It simply became loose, dry, and opaque. A probe could be pushed under the affected nails for a considerable distance. In some cases, however, the nails are very brittle, breaking when the fingers are used. The finger tips were numb. The toe nails exhibited the same condition. The disease always returned in the same nails. Often they were healthy for months together.

Although not strictly connected, I may introduce in this place a statement of other alterations described by Mr. Hutchinson in the last of his articles to which I have made reference:

Chronic Inflammation of the Nail itself as distinct from that of the Nail-bed.—The nails were rough and fibrous over their entire surfaces;

* Dictionnaire de Dechambre, art. Ongles. Deligny, *loc. cit.*

† On the Nails and the Diseases to which they are liable. By Jonathan Hutchinson, F. R. C. S. Medical Times and Gazette, 1878, i. p. 423.

‡ Illustrations of Exceptional Symptoms and Examples of Rare Forms of Disease. By Jonathan Hutchinson, F. R. C. S. British Medical Journal, May 17, 1887.

much thickened, especially in the middle; not in the least loosened; the whole of their free edge was broken away. In the beginning the finger ends had been a little puffy, and felt hot and irritable. Then the nail began to roughen at its root; gradually the condition extended from the root to the tip. The nail of one great toe had lately been attacked. The cause was unknown. The patient was thirty-six years of age, a widow, florid, and of a beautifully transparent skin. Her nails had been perfect until six months previously. She had once had eczema of the genitals, *but it was not present when the affection of the nails began.*

Chronic Inflammatory Disease of Many Finger Nails, beginning in Early Childhood and continuing for Ten Years. History of Syphilis in the Father, but no Signs whatever of it in the Child.—The father had had syphilis several years before his marriage. He had been married thirteen years. The little girl was ten years of age, and had perfect teeth. The disease of the nails had been noticed in babyhood, possibly soon after she was one year old. It consisted of a sort of chronic inflammation at the root of the nail, which caused the lunula to become fibrous and break up, and had repeatedly led to exfoliation of almost an entire nail. In some cases it did not lead to loss, but caused a fibrous opaque condition with transverse furrows or pits. Although sometimes there had been distinct inflammation of the tissues surrounding the nail with suppuration under the edge, nothing like onychia maligna had occurred. Different fingers had been affected at different times. The toe nails had been exempt. There never had been any skin disease except eczema of the scalp in infancy. The nails of the two hands had been affected with tolerable symmetry. There was no reason to regard it as syphilitic. It seemed more like what Mr. Hutchinson has called sycosis of the nails, a suppurative affection of the nail-bed met with in delicate children, often in association with ophthalmia tarsi. But there was no eye trouble nor delicacy in this patient, nor had the disease often been suppurative. No fungus could be detected.

Symmetrical Slight Disease of the Nail in a Young Boy: Syphilis possible, but very improbable.—A boy was four and a half years old when the nail of each ring finger was affected. There was no disease of the adjacent skin or the slightest soreness. The two nails presented a series of little pits on their surfaces over and about the lunula. There were a few minute white dots in the substance of the nail farther on, but for the most part it retained its polish and smoothness. The other nails were healthy. An elder sister had for years had psoriasis, and the father of both had had syphilis many years ago. He had had slight but persistent plantar psoriasis. The child had always been healthy, and the condition of the nails was probably due rather to an inherited tendency to psoriasis than to syphilis.

THE NAILS IN TRUE LEPROSY.—In a lad of eighteen years all the finger nails except those mentioned are broken up and fibrous, much thickened, and lifted by formation of epidermic scales in the nail-bed. There was no smooth surface whatever upon any of the nails. In a few places there were suppuration and scabbing. The only nails to escape were the fourth and fifth of the left hand. That of the fourth is opaque, but not broken up.

CORNS AND CALLOSITIES.—These have been known to form beneath the nail. A paper descriptive of the lesions has been published by Dr. Martel.* The callosity was first observed by Prof. Le Fort in 1882, having before that period been unrecognized. A slight contusion, or, more commonly, the pressure of an ill-fitting shoe, is the cause of the growth. Considerable pain is produced by walking or by direct pressure. Two cases have been carefully described by Le Fort. In one the disease manifestly resulted from the downward compression exerted by a pair of new shoes. The patient first experienced a sharp pain at the extremity of the two great toes. There was no redness, swelling, or ecchymosis to be discovered in the vicinity of the nail, which was slightly raised by an accumulation of epithelial scales. These assumed the appearance of a rudimentary nail beneath the normal nail. In the second case there was no history of tight shoes, but the patient distinctly remembered that at the beginning the great toe was swollen and slightly red at its tip. The nail was thickened and its transverse convexity more pronounced. Walking was at times very painful. The ungual portion of the right great toe was slightly increased in size. There was no lesion of the skin around the edges of the nail. In this condition pressure upon the base of the nail is scarcely, if at all, painful, but upon the middle or free edge is very painful. Beneath the hard, horny lower surface of the nail, at its free edge, could be seen a subjacent whitish layer which anteriorly was very slightly attached to the nail above or the nail-bed below. As it passed backward beneath the nail, however, it became closely attached to the nail and its bed. When the nail was removed and its under surface examined, a kind of duplication was observed. It seemed to divide into two layers, which were distinct in front but blended behind. At the front part of the matrix there existed an epidermic formation of whitish color, rather hard to the touch.

A histological examination of the new membrane showed that its superficial portion was composed of horny epidermic cells, in rather thick layers, while its deeper portion consisted of cells of the rete Malpighii, very clearly defined and much more abundant than normally. The more deeply seated cells assumed a pointed appearance and penetrated the derm.

* *Cor durillon sous-unguéal ou hypertrophie unguéale.* Par Dr. Martel. *Revue internationale des sciences médicales*, July 31, 1888.

Beneath this layer the derm was normal. Prolongations of the derm passed upward in the form of papillæ into the stratum mucosum, and these papillæ were slightly enlarged. The structure, therefore, corresponded closely to that of callosities in general.

The genesis of such a growth is probably due to a slight inflammation of the matrix, with a proliferation of its epidermic layer. Instead, however, of undergoing a horny transformation, the cells remain in the condition of thickened epithelium only—in other words, a callosity or foreign body situated between the nail and its bed.

This seems to be the affection indicated by Follin when he says that “between the nail and the ungual derm is found a heap of stratified epidermic cells, dry, brittle, and easy to separate.”

Martel also describes a case. The patient, an elderly lady, could not wear a shoe or scarcely walk. A heap of hard, dry epithelial scales were seated between the nail and its bed.

A callosity may be with difficulty distinguished from a papilloma, since the former may be regarded as simply a papilloma in which the horny element predominates. Osteitis of the terminal phalanx or a beginning exostosis may be excluded by attentive consideration of the morbid appearances.

Either palliative or radical measures of treatment may be adopted. The former method consists in detaching the new membrane by a bistoury introduced beneath the nail. In the course of two or three weeks the growth is reproduced and needs to be again removed. But, by successive removals, reproduction becomes less rapid and less abundant, and the cure is complete at the end of six or seven months. By the radical method, the entire nail is at once removed and that portion of the matrix from which it develops is scraped until it bleeds freely. Antiseptic dressings may then be applied. A permanent cure results in about a month.

Dr. Martel concludes his paper with the report of a corn beneath the nail. The right great-toe nail of a young woman was very painful upon pressure and in walking. Even pressure of the bed-clothes upon the toe caused pain. On close inspection, a little whitish mass could be seen beneath the median portion of the nail. The mass had the form and size of a grain of wheat. When removed it was evident that it penetrated the corium of the nail-bed, in which it had scooped out a little cone-shaped depression.

Dr. James Nevins Hyde, of Chicago, has described a similar condition in a communication entitled *Observations on Three Cases of Symmetrical Hand and Foot Disease*.^{*} The first concerned a youth, nineteen years of age, in whom no family or personal cause could be found. His general

^{*} Read before the American Dermatological Association, session of 1887.

health was good. Three years previously the tips of the fingers became affected, then the toes, the palms, and the soles. The palms and the soles exhibited the condition to which the term tylosis has been applied. In all the finger nails the free border was tilted away from the axis of the phalanx, and in the angle thus formed appeared a yellowish-white and irregular stratum of horny material. The body of the nail was thickened and its transverse diameter apparently increased. The nail was dry, friable, rugous, and devoid of polish. The nails of the toes were similarly affected to those of the fingers. The second case was that of a young woman, twenty-four years of age. She had had tylosis for four years. All the finger nails were slightly discolored and somewhat rugous. Under the free border could be seen a grayish irregular mass proliferated from the bed. The toe nails exhibited the same condition. The third patient was a male, aged twenty-eight years. The second and fourth finger nails were singularly flecked with shining, white, stellate, and irregularly outlined translucent maculations.

Mr. Hutchinson remarks that in pityriasis rubra the nails never escape. They become opaque from a deposit of epidermis beneath. They are implicated as parts of the general integument, the whole skin being affected. He observes that he has rarely seen nails so much thickened and deformed as in some cases of this disease.

Morbid growths occasionally originate beneath the nail. Mr. Jonathan Hutchinson, Jr., has recorded a case of epithelioma of the nail. The disease is so rare that a case of the kind had never before been reported to the society,* nor is it mentioned in the chief surgical works. The patient was seventy years of age. The disease had existed for several months, but for nearly twenty years there had been occasional inflammation and supuration beneath the nail. Except slight thickening of the nail border, there was but little external appearance of any growth. It was as though about one half of the nail had been eaten away, and its bed, vascular, more irregular, and firmer than normal, formed the base of the ulcer. The microscope showed that epithelial infiltration was arranged in most regular columns or globes, and had not only reached the underlying bone, but had grown under the apparently healthy remainder of the nail for a long distance.

Kraske has given the history † of a sub-ungual sarcoma. A woman, forty-two years of age, had felt a painful sensation under the nail of the left middle finger for twelve years, increased on the least pressure. The trouble was supposed to originate from a severe squeeze. When first seen by Kraske, a linseed-sized blue spot was detected under the nail, pressure

* Case of Epithelioma of the Nail. By Jonathan Hutchinson, Jr. Transactions of the Pathological Society of London, xxxvi, 468.

† Centralblatt für Chirurgie, xxxviii, 1880.

upon which caused the most acute pain. The nail showed otherwise nothing abnormal. The tumor, being removed, was found to be an angio-sarcoma. The tumor had a suggillated appearance due to congestion of the surrounding blood-vessels from compression of the growth between the nail and the phalanx.

Exostosis of the last phalanx of the great toe sometimes occurs. This growth may raise the nail and partly destroy it by ulceration.

PARASITIC DISEASE OF THE NAIL. SCABIES.—The *Sarcoptes scabiei* insect may penetrate the nail. It seems to lodge at first beneath the nail. The bed becomes hypertrophied, its nutrition disturbed, the lower surface of the nail becomes irregular, and the alterations which are observed in the nail plates are ascribed by Bergh to the changes wrought in the nail-bed and matrix, together with the direct action of the insect upon the nail, which is thickened, yellowish or yellowish brown in color. Upon microscopic examination, Bergh detected itch mites, their eggs, and burrows, in the substance of the nail.

FAVUS AND TINEA TRICHOPHYTINA.—The latter has been met with oftener than the former affection. They generally arise by extension from a neighboring patch of diseased skin. Much the same local appearance is produced by either malady. The nail becomes brittle, furrowed, discolored, opaque, and raised from its bed by epithelial proliferation. When the matrix is attacked the nail becomes thickened and may resemble a claw. The characteristic crusts of favus have, in a few instances, been observed. The diagnosis must rest upon discovery of the fungus. Microscopical examination of a nail attacked by tinea shows it to be disintegrated. Threads of mycelium are found.

Parasitic disease of the nail is, however, almost unknown in the United States.

1519 WALNUT STREET.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

200TH REGULAR MEETING.

DR. E. B. BRONSON, *President, in the Chair.*

Pityriasis Rubra Universalis.—DR. LEVISEUR (by invitation) presented a case of this affection with the following history:

John Smith, fifty-three years old, born in Ireland, is a widower with four children. Having served in the navy for three years and a half, he subsequently worked as a mason. He always enjoyed good health, with the exception of a severe attack of fever thirteen years ago. Last November he

noticed for the first time a redness and swelling of both feet, and soon the whole body was affected. The patient was admitted to the Randall's Island Hospital on July 14th. His entire body was covered with an eruption, which was characterized by red coloration of a deep tint and abundant and continuous exfoliation of epidermis in the form of flaky and bran-like, whitish scales. Underneath these scales was a dry, red, shiny, and non-infiltrated skin. It is difficult to describe the coloration on account of its Protean character. It changes with the temperature of the air, is modified by the amount and size of the scales, etc. On pressure, the redness is replaced by a yellowish tint. The legs have a livid hue.

All the minute lines and furrows of normal skin are obliterated, while the large folds and wrinkles have an exaggerated appearance. The peculiar mask-like expression of the patient's face is mostly due to this fact. There is very little infiltration, if any, as I have mentioned above, but the patient's skin feels too small for him. His hands look as if forced into ill-fitting gloves which are several sizes too small. The slight ectropion of the lower lids of both eyes has an analogous significance. The legs are somewhat cedematous. The nails are thickened and brittle, and partially separated from their beds by the accumulation of epithelium beneath. The hair is thin and without its normal luster. Some very superficial rhagades are present around the ears. Very peculiar and interesting is the enlargement of the lymph-glands. The inguinal glands of both sides have attained a remarkable size. They form tumors as big as a hen's egg. Both cubital glands are the size of a walnut; the axillary, cervical, and occipital glands, too, are very much enlarged. On pressure, no pain is produced, and symptoms of inflammation are wanting. The same condition has been reported by Elsberg (*Pityriasis Rubra Universalis*. *Vierteljahr. f. Derm. u. Syph.*, 1887, p. 727).

The patient complains of moderate itching, which sometimes exacerbates at night. He very often is chilly even in the warmest weather. Dr. Van Santvoord, who kindly examined the patient, found a beginning emphysema of the lungs. Spleen and liver not enlarged. The retroperitoneal glands are not palpable. No sugar or albumin in the urine. Temperature normal. Four weeks ago the skin of the calf of the left leg began to ulcerate. This ulcer attained the size of a dime, but healed slowly under an iodoform bandage. The disease seems to be influenced very little by treatment. Fruits, a generous diet, and freeunctions with simple vaseline proved to be the best.

Dr. TAYLOR regarded the case as one of *pityriasis rubra*.

Dr. SHERWELL thought the diagnosis was correct, but did not agree with the dictum of Hebra that the disease was incurable. He reported the cure of a young girl presented to this society who had suffered from the disease for two or three years. Dr. Fox said there were cases of *dermatitis exfoliativa* which might recover in a few months, and others in which atrophy of the skin resulted and death was certain. In the early stages he did not think any diagnosis between the acute and chronic forms could be made.

Dr. MORROW agreed in the diagnosis of *pityriasis rubra*, as the clinical appearances corresponded to cases that were recognized as of that disease.

In the cases of *dermatitis exfoliativa* that he had seen, the scaliness was much more pronounced than in this case. He did not, however, think there

was any well-grounded distinction between this disease and dermatitis exfoliativa except the element of chronicity. The majority of the cases of the latter disease after a certain time lost their pronounced scalliness and presented a dry, atrophic skin. He had never seen a case in which the glandular enlargement was more pronounced.

DR. FOX said the first case he had ever reported got well under the use of acetate of potash; another case since recovered under alkaline treatment.

DR. SHERWELL treated his cases with linseed oil, externally and internally.

Case for Diagnosis—Suggestions for Treatment.—Presented by DR. SHERWELL, with the following history:

John McG., laborer, aged sixty-five. He has giant tuberculo-verrucous growths on the dorsum of the right hand and wrist. Patient had been presented before this society at the December meeting, 1888, but was lost to sight immediately afterward. The growth has now increased about one third in size, presenting about the same general appearance of papillomatous growths of immense size with horny proliferations. It never has been examined microscopically, owing to the patient's refusal to allow of ablation of a piece of the tumor. When an infant the dorsum of the hand and fingers had been severely burned, and the resultant scar left the fore and middle fingers adherent and webbed; they have remained so ever since. The back of the hand presented the appearance before the growth of the tumor of scar tissue, with small islets of skin. Small development of the lesion occurred about six years since. Nothing that could be called active treatment had been instituted.

DR. JACKSON regarded the case as one of tubercular infection.

DR. MORROW considered it one of verrucous tuberculosis, and saw many points of resemblance to the case of tuberculosis papillomatosa cutis reported by himself. He thought good results might be obtained from excision or from curetting.

DR. PIFFARD did not think it was a case of local tuberculosis.

DR. TAYLOR looked upon it as an hypertrophy of the papillæ with epidermal proliferation, and thought good results would be obtained from curetting with antiseptic precautions.

DR. LUSTGARTEN (by invitation) considered the growth a corneus epithelioma. The induration and absence of inflammation negatived the diagnosis of tuberculosis verrucosa cutis.

DR. MORROW desired to know if the simultaneous development of several patches would not contra-indicate the diagnosis of epithelioma.

DR. LUSTGARTEN said that in serpiginous epitheliomata independent foci of disease might be encountered.

Bullous Eruption of the Hand.—DR. R. M. FULLER presented a case of bullous eruption of the hand with the following history:

Josie F., born in the country, nineteen years of age, single. The patient's health is said to have been good until she reached her fifth year, when she contracted malaria, and was treated with large doses of liquid quinine. This treatment is supposed by the parents to have been the cause of the spasms or falling fits which have ever since affected the patient. At first the fits were

of short duration and were followed by sleep. Sometimes she would have two or three fits in succession; at other times there would be an interval of a week between the attacks; the longest interval was nine months. During the last two years she has had a tremor of the right arm.

At the age of seventeen her menses first appeared. Since then, or during the last two years, her periods have been regular as regards time, recurring every twenty-eight days, but always deficient in quantity, and lasting from a part of a day up to two days; their cessation was followed by pain in the pelvic region, and at the same time with a pain also in the part where the vicarious menstruation took place.

Hæmorrhagic discharge commenced in her fifteenth year. At this time her right hand, and especially the index finger, became swollen and painful, and finally a hæmorrhagic discharge took place, through three or four small openings on the palmar surface of the tip of this finger, in amount equal to about four ounces, the orifices opening and closing at times during two days. The hæmorrhagic discharge recurred as before till four months ago, when the soreness extended along the right arm and across and above both breasts, where four patches, of about two inches in diameter each, became congested, and from each of which there was a slight hæmorrhage; but at this time also an amount equal to one pint or more flowed from an opening in the right axilla. Two such hæmorrhages occurred from the openings in the chest and three from the opening in the right axilla. Her last hæmorrhagic discharge was again through four small openings in the right index finger, as at first, and in amount equal, as before, to about four ounces. The bullous eruption spread extensively over the palmar and dorsal surfaces of the hand and more or less over the fingers.

At one time the patient had hæmaturia, but has been completely relieved by treatment. She has been troubled by constipation since she was five years old, for the relief of which she has usually taken castor oil: sleeps well when not in pain; her appetite was always poor, and her diet light, consisting principally of condensed milk and a little meat; has had no headaches except after the fits, and then only in the top of the head; has had no leucorrhœa. The case is still under observation.

DR. MORROW said that the case was unique. He had seen the case two days before and was surprised at the extent of the lesion and the quantity of serum present; a great bag several inches in length, containing fluid, hung down from the hand. The finger contractions he looked upon as hysterical in character.

DR. PIFFARD considered the phenomena as uterine in origin.

DR. LUSTGARTEN looked upon the case as one of hysteria, with skin symptoms. A very accurate investigation would be required to determine whether or not the eruption could be produced by suggestion. The case recalled to him those reported by Kraft-Ebing, in which cutaneous eruptions had been produced by suggestion and auto-suggestion.

Dermatitis Bullosum (Medicamentosa?)—DR. CUTLER presented a case of dermatitis bullosum of the face and hands with the following history:

John S., aged thirty, American, and a waiter by occupation. Patient had syphilis eleven years ago, and was treated for it so that he had had no symp-

toms of the disease for the past ten years. One week ago the patient noticed that his face smarted, and soon afterward there appeared a number of blebs about the size of a small finger-nail, some of them running together, forming larger bullæ. Within twenty-four hours some thirty of these lesions had made their appearance, nearly covering the upper portion of his face and forehead. These lesions were very superficial, many of the bullæ rupturing spontaneously within a few hours after forming, leaving an excoriated surface, which afterward crusted over. Two days after the eruption made its appearance on the face, flat, deep-seated bullæ came on the fingers and hands. The eruption on both the face and hands was accompanied by some pain and burning, but no itching.

On examination, five days after the eruption made its appearance, the patient's face presented some thirty round and irregularly shaped lesions, mostly discoid and covered with thin, brownish-colored crusts, which were easily removed, leaving superficially excoriated red surfaces beneath, and not surrounded with an inflammatory areola. There were some ten flat, bullous lesions on the fingers and backs of the hands, each one containing a seropurulent fluid and surrounded by a red, inflammatory areola. These bullæ were deep seated, quite painful, and showed no tendency to rupture, looking very much like a burn of the second degree.

The patient denied at first having taken any medicine at all before the eruption made its appearance, but afterward acknowledged having taken small doses of quinine and iron three weeks previously.

DR. MORROW was disposed to attribute the eruption to the medicine which the patient had been taking. He did not think one was justified in excluding a drug eruption because it was not typical, as he thought a great many drug eruptions had not been described. The transitory character of the rash was an argument in favor of a drug eruption.

DR. ALLEN regarded it as a drug eruption, probably produced by quinine. He had in his own person produced a quinine eruption, consisting of large erythematous spots, on three successive occasions, and each time the lesions on the hands occurred on the same locality.

DR. KLOTZ thought it was a drug eruption, but would suggest experimental inoculation and the internal use of quinine to determine its cause.

DR. CUTLER did not think the eruption impetigo contagiosa, as suggested by Dr. Fox. Within forty-eight hours after the appearance of the eruption on the face it had completely developed on the extremities. The lesions on the fingers did look like those of impetigo contagiosa, but those on the face were much more like a dermatitis medicamentosa.

Psorospermose Folliculaire Végétante.—DR. WEISS (by invitation) presented a patient with this affection:

M. L., forty-nine years of age, German, had enjoyed perfect health up to his twenty-third year. When twenty-four the patient commenced to experience tightness in the chest and oppression thereon. He was troubled by headaches and pains in the back and lumbar region. These pains set in paroxysmally. In 1865, after getting his leave from the army, he was once caught on the street by this paroxysm of pain and oppression. He had to be carried home and put to bed. At the same time he was seized with high

fever. Presently an eruption showed itself on the chest and on the back of the trunk. I saw the patient in 1881. He exhibited what I at that time found to be a fair example of lichen ruber Hebra. The parts mentioned before were covered with minute red papules, on the tops of which there were fine, hardly visible, film-like scales, brought to appearance by a magnifying lens. The whole gave the impression of a large, red, inflamed area covered with minute papules. The eruption afterward became general. The patient, in the lapse of years, was seen by eminent dermatologists, and his case was unanimously declared one of lichen ruber Hebra. Time, age, physiological insults like scratching, and pathological changes like thickening of the skin, changed the aspect of the case greatly. He now exhibits over the whole surface a papulous eruption, which in some places resembles a seborrhoeic eczema, while in others, like on the small of the back, the lichenous character is yet preserved. I may be allowed to doubt whether this case has any semblance to Darier's psorospermiosis folliculaire végétante after the explanation just given.

Pityriasis Rubra Pilaris seu Lichen Ruber.—DR. FOX presented a woman with this disease, and also showed photographs illustrating the appearance of the eruption at a previous period. Patches of the eruption had entirely disappeared.

He called attention to individual papules at the margin of the large patches which closely resembled those of lichen planus. They were minute, with flattened, shining surfaces, and in some cases a central depression at the follicular orifice. They lacked, however, the angular outline and characteristic purplish line usually noted in lichen planus, and could not be regarded as a proof of the identity of lichen ruber and lichen planus any more than the flattened, shining papules, sometimes seen in a papular eczema, could be considered as indicating an identity of those affections.

Microscopic Preparations of Psorosperms.—DR. LUSTGARTEN (by invitation) showed such preparations, taken from the patient presented by Dr. Weiss. He looked upon the organisms found as having an aetiological relationship to the disease, although as yet no absolute proof had been produced.

Disease of the Nails.—DR. FULLER also presented a case of disease of the nails, with the following history:

Margaret R., born in this country, forty-six years of age, widow. On examination, the nails upon the fingers of the left hand alone were found to be affected. The remaining nails, upon the hands as well as those of the feet, presented a normal color, with polished, glistening surfaces. The affected nails showed a dulled surface and a slightly worm-eaten condition: they were also light in color; they were free, however, from discoloration or pigmentation. Beyond the lunula of all the affected nails, and extending to near their extremities, were to be seen decided transverse ridges across the nails. Their free extremities had an uneven outline and were brittle when cut. Their root or matrix and surrounding skin were not inflamed.

The patient says that she noticed a scratch upon the inner surface of her left wrist about three years ago, and soon thereafter a lump appeared in the left axilla, which disappeared after making some simple applications. A slightly squamous eruption then appeared upon the elbows, back, and knees.

The eruption has continued to appear and disappear upon various parts of the body up to this date. The left hand has been mostly affected, and its palmar surface fissured, and now presents an eczematous aspect. The patient denied ever having had syphilis.

Idiopathic Multiple Pigmented Sarcoma of the Skin (Kaposi).*—DR. FORDYCE presented a patient with this disease.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Syphilitic Reinfection.—All those who have for some time followed the services of the Hospital St. Louis have been struck with the fact that the greater number, if not all, of the physicians of this hospital speak with a certain skepticism of the possibility of syphilitic reinfection.

Professor Fournier has quite recently expressed himself in these terms: "We do not know of a recurrence of the chancre. . . . Syphilis does not double itself" (fourteenth weekly reunion of the physicians of the Hospital St. Louis, March 7, 1889). It is impossible to be more categorical, yet, nevertheless, the published cases of syphilitic reinfection are quite numerous. One can not but admit, on the other hand, that in the immense service of the Hospital St. Louis cases analogous to those published from time to time in current literature should have been encountered.

We believe that the cause of this apparent anomaly is found in the difficulty of the positive diagnosis of syphilitic reinfection. When one analyzes and closely examines into a case appearing at first altogether probative, it is readily seen that it is almost always found to be susceptible of the gravest objections.

I certainly have not the pretension to assert that all the cases of syphilitic reinfection published to the present time are so many errors, but I believe that many of them are disputable, and this question seems to me sufficiently important to again bring it before our American readers.

In order to be able to affirm that we are in the presence of a case of syphilitic reinfection, there is necessary, says Professor Fournier—

1. An indurated chancre with indolent inguinal pleiades: then, some weeks later, a typical roseola or other syphilitic eruption, cephalalgia, alopecia, mucous patches, etc.

2. A complete silence of tertiary accidents for some years.

3. A new indurated chancre after a suspicious coitus with characteristic adenopathies, followed after some weeks by incontestable secondary accidents, such as headache, alopecia, mucous patches, typical eruptions of macular or papular syphilides, etc.

Now, the difficulty lies in the exact appreciation of each of these three elements of the problem.

* Will be reported in the January, 1891, number of this Journal.

1. *Former Attack of Syphilis*.—This first fact has been too often loosely decided in the majority of published cases. One should not rely exclusively upon the word of the patient. It is necessary to have the testimony of the physician who has seen and treated the specific accidents. I may add that the physician should be *au courant* with all the difficulties of venereology and dermatology. All of us have seen patients attacked with herpes, balanoposthitis, and with non-specific cutaneous eruptions, such as pityriasis rosé de Gibert, lichen planus, acute psoriasis with small lesions, which have been diagnosticated by their physicians—and by intelligent physicians—as being a characteristic crop of secondary syphilis. The diagnosis is not then always simple and easy; it requires to be surrounded with numerous guarantees.

2 and 3. Some years later, a new syphilitic chancre followed by typical secondary accidents.

There are here two principal causes of error, the existence of which has become but recently known and which should be seriously taken into consideration. I refer to the possibility that a syphilitic who has had syphilis for several years may develop spontaneously, or as a result of any traumatism: *a. Indurated lesions*, which Professor Fournier has designated under the name of *indurated pseudo-chancres*. *b. Superficial eruptions*, which the physicians of the Hospital St. Louis have recently studied under the name of *roseoles tardives* (Fournier), of *syphilides tertiares érythémateuses* (Vidal), of *érythèmes tertiares* (Besnier), etc.

a. Indurated Pseudo-chancres.—All of our readers may be familiar with this lesion, upon the characters of which I shall not dwell, but content myself with calling attention to the fact that, according to the most recent researches (Fournier, Du Castel, tenth session of the Société Française de Dermatologie et de Syphiligraphie), indurated pseudo-chancres may be divided into two classes:

1. Those which develop, as the result of the spontaneous awakening of the syphilitic virus, in a point where the virus has already manifested its action; in this case it is sometimes possible where one has observed this lesion at its *début* to distinguish it from syphilitic chancre, for, according to the investigations of Messrs. Fournier, Vidal, etc., it commences by a hardness profound from the first, then it becomes excoriated and forms a sore, while the induration of the true chancre is consecutive to the ulceration or, at the most, is contemporaneous with it.

2. Those which occur as the result of an extra-syphilitic irritation, the inoculation of the chaneroidal virus, for example, of a simple herpes, or of any other traumatism. Here the sore has preceded the induration; the difficulty becomes greater when an inguinal adenitis develops, sometimes but slightly painful. Objectively, these lesions are absolutely identical with indurated chancre; sometimes their ulceration is more profound, more excavated, with more secretion, but this character may fail.

b. Late Roseolas.—The accidents which Professor Fournier designates under this name are constituted by syphilitic manifestations, superficial, multiple, resembling perfectly secondary roseola, secondary syphilitic papules, the eruptive elements of malignant precocious syphilides, and which develop

without a new infection several years after the chancre. Moreover, a pseudo-chancere, incontestably indurated, may be followed by a crop of syphilitic accidents, more or less superficial, upon the surface of the skin, as Rollet, Leloir, and Declercq have demonstrated. It is seen that the question becomes complicated in such a strange fashion that it is quite difficult in analogous cases to rightly interpret the facts.

I would not have it understood that I deny that one may never be justified in making a diagnosis of *syphilis doublée*. On the contrary, I have no difficulty in believing *theoretically* in the possibility of syphilitic reinfection; but I may be permitted to remark that the cases which exactly fulfill the conditions of Professor Fournier are most rare, and I should be glad to see published cases which are absolutely irrefutable in all their elements, in order that it may be well and duly established that syphilitic reinfection is a fact *practically* demonstrated.

When this point of doctrine shall be positively demonstrated, the question will be by no means closed. It will be necessary to establish by rigorous statistics, based upon the most careful confrontations, whether a certain number of lesions which we now regard as indurated pseudo-chancres may not be consecutive to infecting intercourse with persons in the full evolution of primary or secondary syphilis, and not to be considered as reinfections mitigated by reason of a former infection.

It is, indeed, logical to admit that it should be the same in syphilis as in variola, for example; and that a first attack, if it does not completely exempt from ulterior infections, ought at least to modify them in a greater or less degree, according to the individual susceptibilities and the lapse of time intervening between the two contaminations.

It may be seen, then, that I am by no means so absolute as might at first appear, and that once the principle of syphilitic reinfection is clearly and definitely demonstrated, I admit that many cases, quite insufficient to prove the reality of this reinfection from a dogmatic point of view, may well be cases of mitigated reinfection in persons already vaccinated by anterior attacks, and in whom a new syphilis may and even ought to pursue a different course of evolution from that of a first syphilis.

Transmission of Syphilis from a Syphilitic after Several Years.—At the meeting of the French Society of Dermatology and Syphilography, July 10, 1890, M. Mauriac has reported a most interesting case in which a syphilitic husband infected his young wife four years and nine months after the *début* of the primitive accident. The contamination was probably effected through the intermediary of small herpetiform lesions of the scrotum, to which the patient was subject. He also cited another case of a patient he had treated nine years previously for syphilis, and who presented no accident at the time of his marriage, yet, two months later, brought to him his wife suffering from specific accidents of the most characteristic nature, dating from his first relations with her. On this occasion Professor Fournier mentioned a case coming under his personal observation in which the patient, attacked with a benign syphilis and subjected to a careful and prolonged treatment, had married late. He presented for some time thereafter very minute lingual erosions, scarcely visible or even perceptible, and having in no respect the

appearance of mucous patches. Shortly after his marriage his wife was attacked with a labial chancre, which was followed by secondary accidents.

It is unnecessary to add that in all these cases the morality of the persons in question was entirely above suspicion, and it was impossible to resort to the hypothesis of a lover as the source of the contamination.

The conclusion to be drawn from these cases is that, long after the chancre, when, according to the ideas at present accepted, we ought to consider the syphilis non-contagious, one may still have superficial accidents of trifling appearance, analogous in their aspect, their situation, and their evolution to manifestations of the secondary stage, and also quite as dangerous, quite as contagious, as these manifestations.

These cases ought to be known, yet they are, nevertheless, profoundly perplexing to the practitioner. What response shall we make to syphilitics who come to inquire if they may marry after four or five years of the disease and even of treatment? Can we conscientiously affirm that they will not carry the least danger to their wives or to their children? And if, unfortunately, such an exception as we have pointed out should occur, should we assume the entire responsibility of such a disaster? On the other hand, have we the right to interdict every hope of marriage to a syphilitic? These are important questions, which have been many times discussed, but which new facts constantly coming change the solution, and which now again appear to enforce the necessity of a vigorous prophylaxis of syphilis.

Precocious Medullary Syphilis.—If syphilitic lesions secondary in aspect may develop during the period formerly denominated tertiary, it has, *per contra*, been long known that grave visceral lesions may happen during the first months of infection. Dr. Gilbert has recently (July 11, 1890) presented such a case before the Medical Society of the Hospitals of Paris in the person of a man who had medullary accidents ten months after his chancre. In this relation he recalled the very interesting work upon this subject, which he has published, in conjunction with Dr. Léon, in the *Archives générales de médecine*. These authors have demonstrated that from the third month of syphilitic infection the spinal cord and its envelopes become, in certain cases, the seat of lesions the specificity of which may be established by the history of the morbid antecedents, by the curative influence of treatment, and by the results of histological examinations.

These manifestations are relatively more frequent from the third to the sixth month of syphilis than later; they are seen especially in men in cases of syphilis imperfectly treated, which is manifest by the confluence and tenacity of the eruptions and by the mixture of accidents tertiary in aspect with secondary accidents, properly so called. They nearly always make their *début* by rhachidian pains, sensations of thoracic or abdominal constriction, lancinating pains in the lower limbs, and by various digestive troubles. Sometimes paraplegic phenomena, accompanied with disorders of micturition and defecation, open the morbid scene. In some cases the disorders attack the four limbs; there may even be cerebral manifestations.

The evolution of precocious medullary syphilis is acute, subacute, or chronic, continuous and progressive, or alternated with remissions more or less complete. In about half of the cases it terminates in a cure, thanks to

the intervention of an active mixed treatment, instituted in an energetic manner and continued for a long time. In the other cases it may terminate in chronicity and incurability or in death.

From an anatomico-pathological point of view, Dr. Gilbert and Dr. Léon have distinguished four types of medullary precocious syphilis: 1. *Hyperæmic and necrobiotic meningo-myelitis*, characterized by congestion and perhaps by multiplication of the vessels of the cord and its membrane. 2. *Embryonic meningo-myelitis*, characterized by cellular hyperplasia, diapedesis, and vascular exudations. 3. *Diffuse sclerous meningo-myelitis*, characterized by a fibrous formation, especially around the vessels, by induration of the cord and thickening of its meninges, so that the new tissue is substituted for the normal meningo-medullary elements. 4. *Gummatous meningo-myelitis*, characterized by the accumulation in certain points of round cells in the form of small tumors, which then undergo the degenerations peculiar to nodular syphilitic products.

Indurated Chancres of Long Incubation.—To continue the study of anomalies in the evolution of syphilis, I will call attention, in closing this letter, to the work of M. Pusch upon the prolonged incubation of the chancre (*Journal des maladies cutanées et syphilitiques*, July 31, 1890). He there recalls the case of Jules Guerin, in which the chancre appeared seventy-one days after coition; that of A. Martin, of a young woman eighteen years old, entered July 15th at the St. Lazare Infirmary, in whom a chancre appeared September 29th—that is, after sixty-one days of absolute seclusion; and those of M. Mauriac, in which the dates of the appearance of the chancre were sixty-three, sixty-nine, and seventy-one days after the last sexual exposure. Professor Fournier, in a work on the long incubation of the infecting chancre, cites as the maximum a case in which the duration of the incubation was seventy-six days. Nevertheless, Simonet and Lefort have acquainted us with a case in which the duration was three months.

M. Pusch adds to these statistics two cases which came under his personal observation. The first was that of a medical student whose last intercourse took place March 20th, and who perceived for the first time June 10th a small erosion, which became gradually transformed into a typical chancre and was followed by secondary accidents; the incubation in this patient was then eighty-one days. In the second case, that of a young woman of seventeen years, the chancre appeared in the form of a *bouton*, of pin-head size, ninety-seven days after the last coitus. Unfortunately, in this case we have to depend exclusively upon the history furnished by the patient, which weakens somewhat the value of the statistics. The author thinks that in these cases of long incubation an intercurrent pyrexia may retard the appearance of the syphilitic chancre. In the case of his second patient it happened that an attack of variola intervened between the date of exposure and the appearance of the primitive accident.

DR. L. BROcq.

PARIS, October 15, 1890.

Book Reviews

Traitement des maladies de la peau, avec un abrégé de la symptomatologie, du diagnostic et de l'étiologie des dermatoses. Par le Dr. L. BROcq, médecin des hôpitaux de Paris. Paris: O. Doin, 1890. Pp. 328.

THE author of this book is by far the most prolific writer upon matters dermatological that France now counts among her sons. He has gained for himself an international reputation, and his name is as well known among us as is that of many an older and, perhaps, more experienced teacher. His writings may be recognized by their great attention to minutiae, by their exhaustiveness, and by their attractive style.

The title of the work is *The Treatment of Skin Diseases*, but it is really a dictionary of cutaneous medicine, with special attention to treatment. It is the dictionary feature of the work that, it seems to us, constitutes its chief claim to an honored place on our book shelves. By this is meant that a great number of names are placed on its pages with references to other more appropriate or preferred names under which the disease is described. Further, the subjects are arranged alphabetically. This does away with the necessity for classification, and aids in ready reference. We find such sections given as baths, diet, ointments, lotions, poultices, and the like. Pathology is but meagerly considered; symptomatology is quite fully given; treatment is detailed at length. Thus fourteen pages are taken up with the treatment of psoriasis. As illustrations of the exhaustiveness with which the subjects have been handled we would note that sixty-seven pages are given to eczema, forty-five pages to lupus, twenty-seven pages to psoriasis, and forty pages to seborrhœa.

The work is a most valuable contribution to dermatological literature, as it presents to us a comprehensive view of French dermatology. This is at the present time of special value, for we are so saturated with German lore that it is well for us to look at things a little more from the Gallic standpoint.

Independent of the great merit of the author's book, it is fortunate in appearing at a time when no strictly modern work on dermatology exists in French literature.

The treatise of Leloir and Vidal, in course of publication, occupied more particularly with the pathological anatomy of skin diseases, taken in connection with Dr. Brocq's excellent book, will afford to any one interested in dermatological matters a clear exposition of the prevailing views of our French colleagues concerning symptomatology and therapeutics, as well as the pathological anatomy of this important branch of the healing art.

In this book we find a good description of all the diseases newly described by French authors, such as psorospermo folliculaire végétante, pityriasis rubra pilaris, and acne keratosa.

It is the aim of the author's work, as expressed in the preface, to popularize dermatology. We are inclined to believe, however, that the division of the various diseases into so many subvarieties may have a tendency to introduce an element of confusion in the mind of the general practitioner. Thus

there are no less than eight varieties of pruritus described, and five pages are covered with a category of terms for baldness. We question the propriety of the employment of purely French names for diseases for which all other nations use Latin names, and also the length of the titles given to many of the diseases. For instance, *dermatite polymorphe douloureuse chronique à poussées successives* for dermatitis herpetiformis.

America is honored by the mention of no less than sixteen of her dermatologists. Of the German authorities, Unna and Hebra have the first place of honorable mention. Naturally the names of French authorities adorn nearly every page.

But, after all these criticisms, it is very true that the work has many positive excellencies, and no one interested in dermatology can afford to be without it. The publisher has done his part well; the press-work and paper are of that high class for which the French press is famous. G. T. J.

Symptomatologie und Histologie der Hautkrankheiten. Von H. LELOIR und E. VIDAL. In Deutscher Bearbeitung von DR. EDUARD SCHIFF. Lieferung I. Hamburg und Leipzig: Verlag von Leopold Voss.

THE book before us is the initial number of Dr. Schiff's translation into the German of MM. Leloir and Vidal's Atlas of the Pathological Anatomy and Symptomatology of Skin Diseases, which has already been noticed at length in the December (1889) number of this Journal. The translation has been made in a most excellent manner by the Vienna dermatologist. The chromo-lithographic plates, which excited such universal admiration, are reproduced in the translation identical in every respect with those issued in the original edition. In size, excellence of paper, and fine press-work, the book is an almost exact reproduction of the French edition.

Mikroskopische Carcinombefunde nebst aetiologischen und praktisch verwendbaren diagnostischen ausblicken. Mit 6 Mikrophotographien. Von Dr. Med. JOS. SCHUTZ. Frankfurt a. M.: Im selbstverlag des Verfassers.

IN this brochure of twenty-three pages, illustrated with six excellent photomicrographs taken by himself, the author gives the results of his original investigations concerning the more minute anatomy of carcinoma, with especial reference to karyokinesis. In sections of cancerous growths placed in Flemming's solution and subsequently stained in hæmatoxylin, an unusual number of cells showing the indirect nuclear division (karyokinesis) are seen.

The writer believes that one can base a conclusion regarding the malignancy of a growth upon the number, size, the variability in size, and the position of the nuclear divisions in the cells of the growth. Since atypic epithelial development can no longer be regarded as a certain diagnostic mark of malignancy, attention to the foregoing facts regarding karyokinesis will often enable one to make an early diagnosis of carcinoma when otherwise it would not be possible.

The author is disposed to agree with those who place the carcinomata among the diseases which can not be dependent upon micro-organisms, as their entire structure is different from the granulation tumors which owe their existence to such a cause.

Books and Journals Received.

Sialorrhoe im Folge einer fast ganz vicariirenden Ausscheidung des Quecksilbers durch die Speicheldrüsen. Von Dr. Ludwig Weiss.

Ueber die Gonorrhoe der paraurethralen und präputialen Drüsengänge. Von Dr. J. Jadassohn.

Ueber das Aristol. Von Professor A. Neisser in Breslau.

Selections.

Acute Peritonitis from Gonorrhœa.

CHARLES H. PENROSE, M. D., in the Medical News for July 5, 1890, reports the case of a negro woman who was infected by her husband with gonorrhœa one month after childbirth. The disease in the husband was of unusual intensity and characterized by great dysuria, a profuse purulent discharge, inflammatory swelling of the whole penis, and œdema of the prepuce.

The wife, when seen, presented all the symptoms of a general peritonitis. The pulse was 130, the temperature 100°. The abdomen was distended and very tender.

There was a profuse purulent vaginal and urethral discharge, and redness and inflammatory swelling of the external genitals. Vaginal examination caused great pain, but revealed nothing more definite than fullness on each side of and posterior to the uterus.

She gave a history of having had intercourse with her husband six days before, while he was under treatment for the severe attack of gonorrhœa mentioned before. Coitus was followed in two days by burning micturition, profuse purulent discharge, and swelling and inflammation of the vulva.

Three days later she had pelvic pain and free bleeding from the vagina, speedily followed by general abdominal pain, tenderness, and distention.

An abdominal section was made which revealed a recent peritonitis in the pelvic, right iliac, and hypogastric regions. The intestinal loops were adherent and distended, and the peritoneum was granular and bled easily, even on contact with soft sponges. The Fallopian tubes were six inches long and the size of the index finger; the walls were thickened, hard, and rigid. They were bound by recent adhesions to the surrounding intestines. There was no sign of old tubal disease. The tubes and ovaries were removed close to the cornua. The abdomen was freely flushed with hot distilled water, and a large glass drain was introduced, which was removed on the third day. The patient recovered, but continued to suffer from the specific urethritis and vaginitis. A microscopic examination of the tubes failed to reveal gonococci. Staphylococci, however, were found in large numbers, occurring in zooglœic masses.

Items.

Koch's Discovery.—In the *Deutsche medicinische Wochenschrift* of November 14, 1890, Professor Koch announces the remarkable results which he has attained with a remedy, as yet secret, in the treatment of the various forms of tuberculosis.

The method seems to have been more successful in lupus, the form of tuberculosis which more especially interests dermatologists. In patients with this affection to whom hypodermic injections of the remedy were given the lupus tissue within a few hours was seen to swell and redden, and finally to become brownish and necrotic. The initial chill and fever follow the reaction in the lupus tissue, and, after their subsidence, the swelling of the affected part disappears. The lupus spots themselves are then covered with a soft deposit, which filters outward and dries in the air. The growth then changes to a crust, which falls off after two or three weeks, and which sometimes, after only one injection, leaves a clean, red cicatrix behind. Generally, however, several injections are required for the complete removal of lupus tissue. Later newspaper reports announce that in patients thought to have been cured of lupus a return of the growth had taken place. This, however, would not detract from the value of the method, but only indicate that a sufficient number of the injections had not been given, or that the remedy had not been employed in the proper strength. Time alone can determine the permanence of the reported cures.

The Medico-legal Value of the Gonococcus.—Professor J. Kratter (*Berliner klin. Wochenschrift*, No. 42, 1890) discusses this question in an interesting manner, quoting a number of cases of vulvo-vaginitis in girls where a positive diagnosis could only be made after finding the micro-organisms in the discharges. He concludes his article as follows: 1. The decision whether or not a vaginal discharge (after rape) is traumatic or infectious can only be arrived at after a bacteriological examination. 2. The detection of gonococci in such a discharge is proof positive of the presence of gonorrhœa which has probably been conveyed in the sexual act. 3. The negative result of such an examination does not justify one in absolutely excluding gonorrhœa, as there are cases of undoubted gonorrhœa in which few gonococci are found, and only after repeated examinations.

The Treatment of Neuralgia Spermatica.—Dr. T. Benda (*Berliner klin. Wochenschrift*, No. 38, 1890) writes of a patient affected with a severe neuralgia of the spermatic cord on whom the operation of castration had been employed in vain. After a slight mitigation of the pain from the use of electricity, a very favorable result was obtained from an apparatus similar to a truss, so constructed as to exercise permanent pressure over the vas deferens and the inguinal region.

Myxœdema and Endemic Cretinism.—Bircher (*Sammlung klinischer Vorträge*, No. 357) contributes an interesting article on this subject. He believes that endemic cretinism is an infectious disease, the infective material being conveyed by the drinking-water, the most important and constant symptom being enlargement of the thyroid. He ends his article as follows: 1. Myxœdema is a sporadic disease. It is due to the loss of function or atrophy of the thyroid; it is a general dyscrasia, occurring chiefly in adults. 2. Cretinism is an endemic complaint. It is due to an infection which is long-continued, children being most susceptible. In addition to hypertrophy of the thyroid, irreparable malformations occur in other parts of the body.

Sycosis.—R. Iodoform, 4 parts; lanolin, 30 parts. Leache recommends the above to be applied every night, and to be washed off in the morning with hot water.

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